Acorn User

THE ALTERNATIVE FOR POWER COMPUTING

WWW.ACORNUSER.COM

REAL WIRELESS LAN

GETTING YOUR RISC OS MACHINES CONNECTED

SW SHOW REPORT

WHAT WAS NEW AT THE SHOW

FIDONET

TRADITIONAL ISP REBORN

RISC OS vs WINDOWS

LOOKING AT WAYS TO INTERACT

AND MUCH MORE BESIDES...



ISSUE 258 APRIL 2003 £4.20

Liquid Silicon

• Computers & Music Hardware • Upgrades • Software • Cables etc •











Call us for your nearest UK dealer for the POSum point of sale systems and the EBMS business management solutions.

Microdigital Computers

Omega Standard (small) Tower (145W PSU)	£1355.00
Omega Midi Tower (240W PSU, 3x 3.5" & 4x 5.25" bays)	£1399.00
Omega Desktop (240W PSU, 3x 3.5" & 3x 5.25" bays)	£1402.00

Options when purchasing:

Optional 300W PSU upgrade for Midi/Desktop cases	£44.65
30Gb drive instead of 20Gb	£25.85
45Gb drive instead of 20Gb	£62.27
60Gb drive instead of 20Gb	£105.75
128Mb instead of 64Mb	£16.45
256Mb instead of 64Mb	£30.55
512Mb instead of 64Mb	£81.07
CD rewriter & software	£145.70
Ethernet card (10/100BaseT)	£52.85
Floating Point coprocessor	£TBA
SCSI 1/2 controller card	£80.99
SCSI 1/2/3 controller card	£115.99
Single board PC (needs processor (below) and Windows) (for Midi & desktop cases only) Fitted with 64Mb as standard – see memory options above for larger replacements.	£680.30
Cyrix M111 processor, 650MHz	£46.35
Intel Celeron processor, 700MHz	£53.40
Intel Celeron processor, 800MHz	£73.60
Intel Celeron processor, 700MHz	£86.00
Intel Pentium III processor, 1GHz	£206.65
Cooling fan (below 1GHz)	£7.05
Cooling fan (Above 1GHz)	£9.40
Windows 98 OEM	£93.99
XScale coprocessor (1GHz)	£210.30

RiscStation Computers

R7500 Lite	£598.00
R7500 Lite+	£656.75
R7500 NetWorx	£480.50
R7500 NetWorx HD	£539.30
R7500 Scorcher	£797.50
R7500 Scorcher Twindeck	£833.00
Osaris	£180.00
Osaris Plus pack	£210.00
Osaris Classroom pack	£857.50
Portable	£1173.00
Portable with docking station	£1465.00
Games pack (with a system)	£47.00

Castle computers

Iyonix (128Mb, 40Gb, CD system) (While stocks last)	£1269.00
Iyonix (128Mb, 80Gb, CDRW system) (While stocks last)	£1319.00
Iyonix (512Mb, 100Gb, CDRW system) Price until 30/4/03	£1419.00
Two slot backplane for taking podules	£49.00
USB to Parallel converter	£25.00

Please ask for modems and USB peripherals.

iiyama CRT Monitors

1352 (15" FST)	£101.20
1403 (17" FST)	£117.45
Pro 1413 (17" NF)	£177.30
Pro 413 (17" NF)	£199.10
1451 (19" FST)	£173.20
Pro 452 (19" NF)	£267.05
Pro 454 (19" HBNF)	£321.45
505 (21" FST)	£552.65
Pro 512 (22" NF)	£566.25
Pro 513 (22" NF)	£471.05

iiyama LCD Monitors

3814 (15" LCD)	£246.65
3817* (15" LCD)	£287.45
3819* (15" LCD)	£397.60
3835* (15" LCD)	£438.40
4314* (17" LCD)	£424.80
4315* (17" LCD)	£552.65
4332* (17" LCD)	£656.00
4611 (18" LCD)	£634.25
4612* (18.1" LCD)	£647.85
4636 (18.1" LCD)	£769.00
4637 (18.1" LCD)	£799.95
4821* (19" LCD)	£799.95
4831 (19" LCD)	£835.00
5131* (20.1" LCD)	£1195.00
5311 (20.8" LCD)	£3149.00
5611 (22.2" LCD)	£5499.00

* Also available in black.

LCD speaker options (ask for more details):

OSP1-1	£58.75
OSP1-1B black	£58.75
OSP2-1	£76.40
OSP2-1B	£76.40
Screen protection sheets (15", 17" or 18.1")	£60.50

Touchscreens

15" CRT	£660.00
17" CRT	£815.00
19" CRT	£941.90
22" CRT	£1195.00
15" LCD	£919.90
18" LCD	£1246.60

Projectors

LPX100 LCD	£1531.80
DPS110 DLP	£1681.40
DPX110 DLP	£1980.60

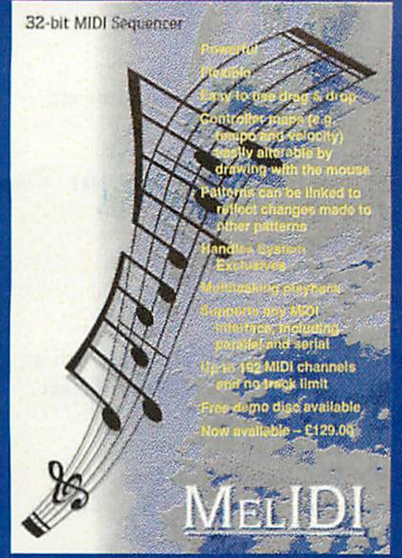


Confused? Need more info? Just ask!





Discs (e.g.20x black discs – £6.28)
Batteries (e.g. 4x AA Xtra alkaline – £2.24)
Also Audio & Video Tapes, Mini discs, CDRs, DAT tapes etc.



Liquid Silicon

Personal Accounts	£44.00
Photodesk Olympic	£127.95
Prophet 3+ Pro	£179.00
Quake	£22.00
R-Comp Internet Suite	£73.95
Schema 2	£121.50
SiteWriter	£58.95
Sleuth 3	£65.95
TBA Games CD	£20.00
TechWriter Pro+	£209.95
TEK	£29.95
WebFX3D	£24.50

Books & Manuals

RISC OS Manuals CD	£29.95

Buying a new system shortly?

Order your RiscStation Portable now and get a free ethernet cable (straight or cross-over up to 10m) plus free carriage.

Order your Omega now and choose from any of the following games offers :

Abuse	£20.00
Chaos Engine	£15.00
Descent 1 & 2	£28.00
Heretic & Hexen	£25.00
Quake	£18.00

No deposits required. Games offer subject to stock levels and may be discontinued at any time. Exact prices and configurations will be agreed beforehand.

Memory Upgrades

Please call to check current prices.

Risc PC/A7000/RiscStation/Mico SIMMs:

16Mb FPM	£28.20
64Mb EDO (works in Risc PCs)	£39.00
128Mb EDO	£77.55
2Mb VRAM	£89.95

Music & Sound Section

Please call for other musical items

MIDI interfaces:

MIDI Max II internal 1x1x1	£93.95
Parallel Port 1x1x1 (back in stock)	£92.95
RiscStation MIDI drivers & cable	£17.95
RiscStation XG card & cable	£116.95
RiscStation XG card, cable & keyboard	£245.95
Sibelius 6	£99.95
Sibelius 7 Student	£319.95
Sibelius 7	£520.95
Sibelius 2 for PC/Mac is also available	
Sound module serial port driver	£37.95

Other Hardware

10/100BaseT ethernet card (RCI/Simtec)	£89.00
Cordless keyboard & optical mouse	£79.99
Cordless Mouseman Optical PS2/USB	£54.95
Mouse (Genius/STD Acorn-compatible)	£19.95
Mouse (PS/2 Logitech)	£14.99
PS2MouseMini adaptor for older machines	£18.95
Printers	£Call
Risc PC second slice (no PSU)	£95.00
RISC OS 4 (fitting & Select available)	£109.95
RiscStation second serial port	£10.95
Scanners	£Call
StrongARM & RISC OS 3.7 upgrade	£269.00
StrongARM & RISC OS 4 upgrade	£299.00
ViewFinder card (32Mb)	£240.00

Other Software

Abuse	£20.00
C/C++ (26/21-bit version)	£195.00
CD Burn	£55.95
Chaos Engine	£19.50
DataPower 2	£165.00
Doom+ CDs	£30.00
Descent CDs	£25.00
Desktop Repton 3 CD	£15.95
EasiWriter Pro+	£139.95
FastSpool+	£17.50
Grapevine	£24.95
Heroes of Might & Magic 2	£32.00
Krisalis Collection Gold CD	£25.95
OHP 2	£37.95
Oregano CD	£57.50
Other Worlds CD	£17.95
Ovation Pro	£138.95

Second hand machines and components:

These machines have mainly come from schools and businesses. As such there are various brandings, labels, markings, scratches, very occassional broken bits (e.g. front flaps) on the cases. All machines have been generally cleaned and air dusted inside to get rid of most of the dust, however the cases have not been meticulously cleaned as this would take a long time and increase the prices considerably. Any machines which have PC cards are usually 486 cards, but as these are basically worthless, their value has not been taken into account (and they might not have all the software on the disc to work them anyway). Get free carriage if you also take a monitor (the 'b' indicates an additional £10 carriage charge). Keyboard, mouse and mains cable included. Single slice machines do not have backplanes unless specified. Ethernet cards etc. can be taken out if not required. There is a three month warranty on these machines and they are supplied 'as seen', so to speak. All details are subject to change and please check availability before ordering.

A7000, RISC OS 3.6, 8Mb, 406Mb HD, 10BaseT ethernet card, fan	£60.00b
A7000, RISC OS 3.6, 18Mb, 406Mb HD, 10BaseT ethernet card	£60.00b
A7000, RISC OS 3.6, 20Mb, 406Mb HD, Combi ethernet card	£60.00b
A7000, RISC OS 3.6, 20Mb, 406Mb HD, Combi ethernet card, backplane & fan	£70.00b
A7000, RISC OS 3.6, 20Mb, 406Mb HD, Combi ethernet card, CD drive & fan	£70.00b
A7000+, RISC OS 3.71, 16Mb, 163Mb HD, 10BaseT ethernet card	£70.00b
A7000+, RISC OS 3.71, 24Mb, 203Mb HD, 10BaseT ethernet card	£70.00b
A7000+, RISC OS 3.71, 16Mb, 1225Mb HD, 10BaseT ethernet card	£80.00b
A7000+, RISC OS 3.71, 24Mb, 1225Mb HD, 10BaseT ethernet card	£80.00b
A7000+, RISC OS 3.71, 24Mb, 1225Mb HD, Combi ethernet card	£80.00b
A7000+, RISC OS 3.71, 24Mb, 406Mb HD, 10BaseT ethernet card, CD drive	£80.00b
A7000+, RISC OS 3.71, 16Mb, 1221Mb HD, 10BaseT ethernet card, CD drive	£90.00b
A7000+, RISC OS 3.71, 24Mb, 1623Mb HD, 10BaseT ethernet card, CD drive & fan	£95.00b
RPC 610, RISC OS 3.5, 4+1Mb, 203Mb HD, backplane, Impression, EasiWriter, Eureka	£80.00b
RPC 610, RISC OS 3.5, 16+1Mb, 203Mb HD, Combi ethernet card, PC card	£110.00b
RPC 610, RISC OS 3.5, 36+1Mb, 515Mb HD, 10BaseT ethernet card, PC card	£130.00b
RPC 610, RISC OS 3.5, 20+1Mb, 203Mb+327Mb HDs, CD drive, 16-bit soundcard HCCS IDE card, Combi ethernet card & AccessNT, PC card, 2 slices	£190.00b
RPC 710, RISC OS 3.5, 40+1Mb, 203Mb HD, Combi ethernet card	£120.00b
RPC 710, RISC OS 3.7, 16+1Mb, 203Mb HD, 10BaseT ethernet, Cumana CD drive	£150.00b
RPC 710, RISC OS 3.7, 16+1Mb, 203Mb HD, 10BaseT ethernet card, CD drive	£150.00b
RPC 710, RISC OS 3.7, 16+1Mb, 203Mb HD, Combi ethernet card, CD drive, PC card	£150.00b
RPC SA, RISC OS 3.7, 16+1Mb, 203Mb HD, Combi ethernet card	£280.00b
RPC SA, RISC OS 3.7, 16+1Mb, 203Mb HD, Combi ethernet card, PC card	£280.00b
RPC SA, RISC OS 3.7, 16+1Mb, 406Mb HD, Combi ethernet card	£290.00b
RPC SA, RISC OS 3.7, 12+1Mb, 203Mb HD, Combi ethernet card, Cumana CD drive	£300.00b
RPC SA, RISC OS 3.7, 16+1Mb, 203Mb HD, Combi ethernet card, CD drive, PC card	£300.00b
RPC SA, RISC OS 3.7, 20+1Mb, 203Mb HD, Combi ethernet card, CD drive	£300.00b
RPC SA, RISC OS 3.7, 20+1Mb, 203Mb HD, Combi ethernet card, CD drive, PC card	£300.00b
RPC SA, RISC OS 3.7, 20+1Mb, 203Mb HD, Combi ethernet card, Cumana CD drive	£300.00b
RPC SA, RISC OS 3.7, 20+1Mb, 203Mb HD, Combi ethernet card, CD drive, PC card	£300.00b
RPC SA, RISC OS 3.7, 64+1Mb, 203Mb HD, 10BaseT ethernet card, CD drive	£310.00b
RPC SA, RISC OS 3.7, 12+1Mb, 2014Mb HD,Cumana CD,10BaseT ethernet, PC card	£320.00b
RPC SA, RISC OS 3.7, 16Mb, 406Mb HD, Ultimate card & CD drive, Combi ethernet card, XOB Teletext card, backplane	£350.00b
Two slot backplanes	£10.00
Combi/10BaseT ethernet cards	£30.00
Internal IDE CD drives	£Call
Second hand monitors:	
PC SVGA 14"	£20.00b



FREEPOST EH2725
Kirkcaldy, Fife, KY2 5BR
United Kingdom
Tel: 01592 592265 Fax: 01592 596102
email: sales@liquid-silicon.com
http://www.liquid-silicon.com

We will attempt to match or beat ***any*** *advertised price – even special offers.*
Our ***free*** *catalogue contains over 2000 items.*
Please ask for a copy or visit our web site for latest prices.

All prices INCLUDE VAT & UK carriage

Official orders, foreign orders and callers welcome.














* 19" SONY-manufactured P991 monitor for sale. Totally flat Trinitron screen, anti-static, anti-glare. Flicker-free resolutions up to 1600 x 1200, although the resolutions will go much higher than this. Works on RISC OS, PC and Mac systems. Excellent condition, can be seen working. £280 and will include Impression Publisher (StrongARM), Destiny (RISC OS Doom-like game) and delivery in that price. Call 0113 246 5303 or email ms@arenaman.com

* Vantage £70, ArtWorks (latest CC StrongARM version) £40, Photodesk Olympic
£35, Oregano £25, RiScript £20, Messenger Pro (26bit) £15. Everything includes manuals, original disks and postage and packaging. Call 0113 246 5303 or email ms@arenaman.com

For sale: Epson GT9000 flatbed scanner, ports for SCSI and parallel, original instructions and "image master" software. Collect from Bournemouth. Offers to
Pete: 01202 768960

•Acorn items for sale:
[1] Single slice Risc PC. ARM610; 6MB RAM; 1MB VRAM; 420MB HD; Cumana CD-ROM; RISC OS 3.50. Original mouse, keyboard, manuals and boxes.
(2) Two slice Risc PC. StrongARM SA-110; 64MB RAM; 2MB VRAM; 2GB HD; 24-speed CD-ROM; RISC OS 3.70. Original Mouse, keyboard, manuals and boxes.
(3) Psion Series 3c PDA. 2MB RAM; Mains adaptor; Leather Case; PsiRisc Acorn link software. All original boxes and manuals. (4) Cumana SCSI2 Podule.
(5) CJE 5x86 PC second processor card for RiscPC. 133MHz, 512k cache. Comes with PCPro software.
(6) Computer Concepts LaserDirect4 laser printer plus podule. All software and original manuals.
(7) Epson GT9000 A4 flatbed SCSI scanner. Original boxes and manuals.
(8) Software (all boxed with manuals and bits): Artworks; Eureka v3; Ovation Pro; Impression 2; Fireworkz Pro; Mr Clippy; ImageFS 2; SparkFS; Keystroke; PCSound Professional; Wina95FS; WMF IT; Clip IT; ImageMaster; ANT Internet Suite 2; Compression; ArcFax; Virtualise; Font Directory 2; Touch Type; PublishArt; PublishArt 2. Any reasonable offers for all items (or combination of items) above. P&P charged at cost or available to collect.
Contact Jon Aylwin 029 2041 0678 or jon@aylwin.org.uk

• Two Master 128s, 3 disc drives, 1 Cub Monitor, 2 mice, software, £50 buyer collects. East Kent Coast. **Phone 01303 873364.**

• Wanted: All Acorn A3000s, A3010s, A3020s, A4000s, A5000s, A4s, Risc PC 600 & 700s, StrongARM Risc PC's, Kinetic Risc PCs. Anything considered. Can travel. **07930 507815 or 07775 776217.**

• Acorn A5000 including monitor etc plus additional software including Advance suite. Any sensible offer considered. **Contact Robert on 0191 5191231 or at robertvardill@beeb.net**

• Wanted: Irlam Instruments Videodesk editing system. Any other video editing card suitable for use with a Risc PC also considered. **Please contact chris@acdale.demon.co.uk**

• Eagle M2 multimedia card; replay video production, HQ video stills, digital stereo sound sampler, full MIDI IN/OUT/THRU facilities, RISCPC compatible. Offers around £160. Multimedia software; Midiworks, Prosound, Cineworks (includes AppleFS) and Genesis Professional £35 each plus postage or £120 for all three. Eagle M2 plus all four packages £250 plus postage. **Enquires or offers 0151 547 3993 or email aokai@tiscali.co.uk**

• A two foot stack of Acorn User magazines for sale, complete with cover discs, from Sept 1994 to end 2001. Also other Acorn magazines and discs. Best offer secures this 12kg pile. **Tel. Coventry, 02476 319519**

• Wanted: All Acorn A3000s, A3010s, A3020s, A4000s, A5000s, A4s, Risc PC 600 & 700s, StrongARM Risc PC's, Kinetic Risc PCs. Anything considered. Can travel. **07930 507815 or 07775 776217.**

Acorn User Free Ads Service

Your name:..Your phone number:..

Why not take advantage of our free reader ad service? Fill in your details on this coupon (24 words maximum, one word per box below) and send it to **Free Ads, Acorn User, 28a Middle Hillgate, Stockport SK1 3AY** or by e-mail to: **freeads@acornuser.com**. Only one ad per reader please, private sales or wanted only.

Although we try to publish every ad we receive, we can make no guarantees; publication is entirely dependent on space and time constraints.

Please fill in your name and telephone number below – these will not be published but enable us to contact you in case of any queries. Make sure you include your own town/county in your ad to help potential buyers with their purchasing decision.

Editor
Rob Donaldson

Advertising
Steve Turnbull

Design & Layout
Johnathan Caldwell

Finance Manager
Gary Duxbury

Distribution COMAG
(01895 444055)

Subscriptions:
(+44/0) 161 429 8902
E-mail:
subscrip@acornuser.com
Annual (13 issue)
subscription rates:
£46.99 (UK)
£63.99 (World)

Published by



28a Middle Hillgate
Stockport SK1 3AY UK
enquiries@acornuser.com
www.acornuser.com
Tel: (+44/0) 161 429 8902
Fax: (+44/0) 161 429 0685
Printed by The Manson Group, St Albans



If you know someone who is Blind or partially sighted Acorn User is available on Audio format. Full information is available from The Talking Newspaper Association, National recording centre, Heathfield, East Sussex TN21 8DB. Tel 01435 866102

Internet services provided by Spellings Computer Services
www.spellings.net

Contents

04 FREE ADS
08 NEWS
OMEGA OUT AND ABOUT
15 GRAPHICS
QUICK RECIPES FOR SINGLE LETTERS
16 WIRELESS LAN
RISC OS WITHOUT WIRES
20 SHOW REVIEW
SOUTH WEST SHOW
28 RISC OS VS WINDOWS
CONVERSION TOOLS
32 S-BASE
PART 15: GETTING INTO PRINT
34 FIDONET
JON MORBY PIECE
16 REVIEW
ARTWORKS ENHANCED
37 EDUCATION NEWS
40 EDUCATION
TESTING TIME FOR YEAR 6
42 LETTERS
NOT FORGOTTEN

Note from the Editor

In this issue of the magazine you can read all about the South West Show. It went pretty well, with some highs that were very high and some lows that were less than attractive. However, on the whole, a decent show.

It has been reported to me that a number of RISC OS dealers and developers have expressed an interesting opinion since the release of the Iyonix PC back in December. And it is this:

Since the release of the Iyonix PC sales of RISC OS related products have increased. This is not sales of the Iyonix PC itself nor necessarily of 32-bit enhanced products, this is other items.

Essentially what we see here is that the mere existence of a new computer, not just a new version of existing software, but 32-bit, a real advance a real technical change and sidestep out of the dead-end street we had all been wandering around in.

And it was a dead-end. Let's make absolutely no mistake about it, Acorn had led us all up a street with a blank wall at the end and left us all there. Not nice.

This type of dead-end needs money to get out of, and the nature of the market meant that simply there was no money to be spent. Or rather it would potentially have been possible to do it if the situation had been grasped with both hands by someone who could lead the market. But it wasn't.

Instead there were attempts to make the dead-end look nicer. To spruce it up with with pretty decorations, fooling people into thinking (even though we all knew it was a dead-end) that the painting on the end of the wall was reality.

Painting on the wall? Oh, you know the one, it's like in Wiley Coyote cartoons, paint a perfect picture of the distant terrain on a solid wall. Give the impression that you can go through it, but when you try ... blam! You knock yourself out.

And that's what we had. A painting on the wall. Apparently we didn't really need to move ahead at all, we just needed the illusion of advancement.

But the market has proved that in truth we don't want illusions. We all know where the true route lies, or even the true routes.

We have had two companies come along and say "look here, we've got a ladder to get over this wall, and the other side looks really attractive". Now unfortunately one of those ladders, the one that was offered first, has not materialised although a prototype ladder has been seen and it is beginning to look more solid.

But the second ladder is in place and plenty of people are beginning to climb up and over. Of course there are those people who are happy milling around at the end of the street, maybe they're scared of heights.

And in the past there are plenty of people who have gone back down to the main road and taken an alternative route (which looks very nice but is frankly a rough ride).

But there are enough people going over the wall, so why not join them?

Rob Donaldson

Need access to a PC but don't have space for a new monitor, keyboard and mouse?



Step 1 - Specify a PC base unit if you don't have one....

We can supply of-the-shelf or custom PC base units to your specification, and are happy to provide a comprehensive no-obligation quotation suited to your needs - please contact us for a competitive quote!

Step 2 - Add our Keyboard Controlled Switch

This miniature switch allows keyboard, monitor and mouse to be shared between two machines. Rated to 1920x1440 display and supplied complete with all cabling (UL2919 rated) and comprehensive instructions

Enhanced for RISC OS machine - if it hasn't got our name outside the box it doesn't have our modifications inside the box!

Supplied as a pack including our PS2MouseMini interface: £99.95inc
Above pack when purchased with PC base unit: £90inc

Keyboard controlled switch alone: £89.95inc
Professional 4- and 8- port switches available (example 4 port £160 inc UL2919 high-quality cabling)

NEW!
Iyonix compatibility pack
£34.95inc

Step 3 - Attach your existing RiscPC/A7000 and monitor

Add a networking pack if required...
... and switch between the two with a couple of keypresses!

(not to the same scale as the PC! The switchbox is about the same size as 2 kitchen matchboxes)

Memory Corner: Compact Flash: 32MB=£16.75; 64MB=£26.00; 128MB=£44.00; 256MB=£85.50; 512MB=£190.00; SmartMedia: 32MB=£12.75; 64MB=£23.25; 128MB=£46.00; MultiMedia Memory Card (MMC): 32MB=£16.75; 64MB=£37.85; Secure Digital (SD): 32MB=£27.85; 64MB=£44.00; 128MB=£87.00; USB Flash Memory Drives: 32MB=£23.00; 64MB=£35.00; 128MB=£59.00; 256MB=£110.00; 512MB=£261.00; 1GB=£560.00

We can supply other memory, hard-drives, cables, interfaces, bespoke microcontroller design etc - please contact us for details.....



Hand track trackballs: Standard corded £14.95; Laser corded £19.95; Laser designed for use in presentations etc - they will not cut materials but care

EEK!

Our PS2MouseMini interface allows you to use PS/2 PC mice with your RISC OS machine.
Over 2000 sold!
Only £18.95inc

3 button PS/2 mouse £5.95inc
Genius wheel mouse £12.95inc
Genius optical mouse £17.95inc
Genius wireless wheel mouse £19.95
Genius Optical Wireless mouse £29.95

Device above require PS2MouseMini for use on RiscPC.

STD Standard Mouse (3 button mouse, no need for adaptors etc)
£19.95inc

Multimedia Keyboard (includes RISC OS drivers)
£24.95inc

UPS

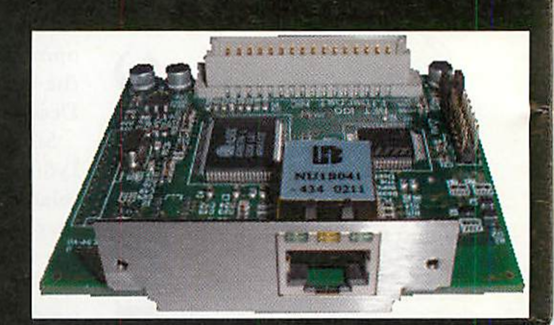


A sensibly specified uninterruptable power supply

- 650VA rated
- Up to 45 minutes backup
- AVR (will boost or buck mains voltage if out of tolerance)
- 320 Joule mains spike protection
- RFI filtering
- Filtered and protected modem sockets
- Supplied with cabling to attach to 2 machines/devices

£64.95 + £10 carriage = £74.95inc

NET100



- 10/100BaseT Network interface card for RiscPC/A7000
- Provision for access to 10 or 100 Megabit networks
- Several hundred KBytes of FLASH memory for drivers
- Provision to modify FLASH contents for other drivers
- Lower latency than conventional 10 Megabit cards
- High integration brings affordable networking

Only £69 + del + VAT = £89inc
Pack to link RISC OS to PC (Net100, PC net card, crossover cable) = £110inc
RISC OS link pack (2xNET100, xover cable) = £185inc
High performance network switches: 5 port = £45inc
8 port = £75inc
Lanman98 = £41inc
Cables and other networking devices available

Omega out and about

The Microdigital Omega has been popping up at a variety of events and shows over the past few months. Several units appeared at the South West show in Loxton on a variety of exhibitors stands, Arche Acorn Usergroup in Germany have been playing with systems and more "production" units were spotted at a recent Wakefield RISC OS Computer Club meeting.

Microdigital seem to be telling people (but not us directly) that the only delay now in getting these machines to customers is a "contractual disagreement" which is awaiting resolution.

The "production machines" that were on display apparently contained a 306MHz StrongARM and were running RISC OS 4.03. This implies that initial production Omega's (without the XScale) will run all existing 26- and 32-bit software out of the box.

Win Omegas at Wakefield

The organisers of the Wakefield 2003 show are pleased to announce not one, but up to FOUR prize draws for people attending this year's show.

One will be for all the Exhibitors attending this year's show. The prize will be no less then a new Omega for the lucky exhibitor!

Meanwhile for all those visiting the show, there will be a series of draws at 12 noon, 2pm and 3.30 pm, with prizes donated by exhibitors attending the show. In the final draw of the day at 3.30pm, three additional prizes are being donated, these being in reverse order, a surround system for the Soundcard of an Omega, a CDRW drive and finally as top prize an Omega computer itself.

In addition to the prize draws, the organisers hope to have a small side show of Racing Motorcycles on display.

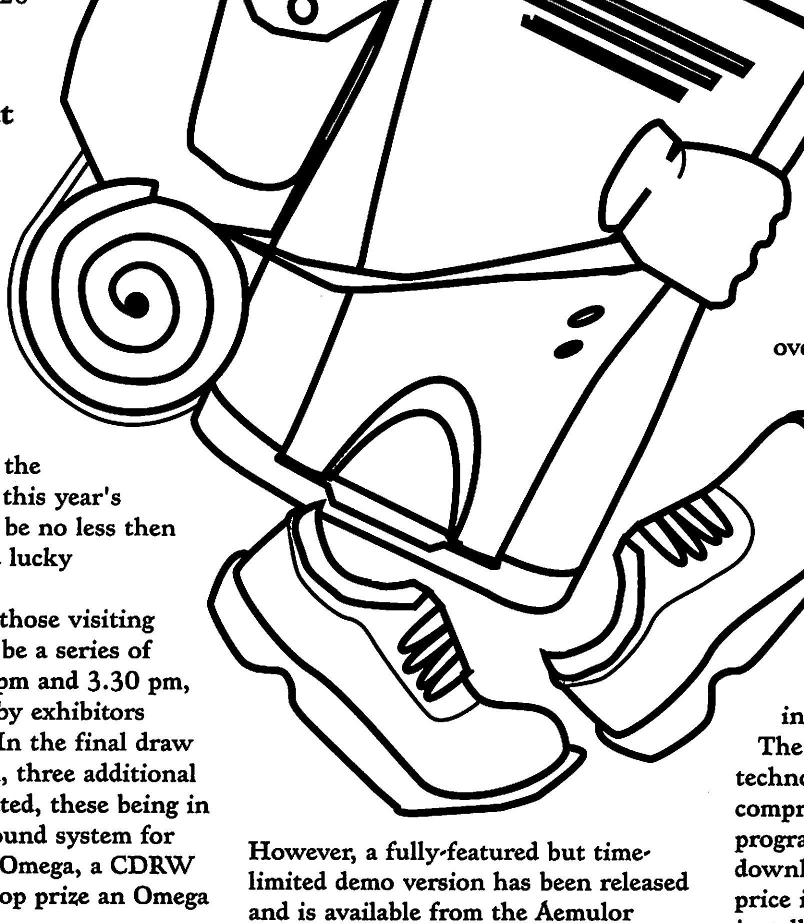
The list of exhibitors for Wakefield 2003 is growing almost daily, so keep an eye on the show website for the latest news on exhibitors and product announcements.

Show details are:

Saturday, 10th May
Opening Times: 10:00 to 16:30
Entrance fee: £5 on the door (sorry no credit/debit cards)
Free car parking
www.wakefieldshow.org.uk

Aemulor release delayed

The release of the 26-bit emulator for Iyonix PC and RISC OS 5 has been put back from January to March 2003.



However, a fully-featured but time-limited demo version has been released and is available from the Aemulor website.

The main reason for the delay was stated as being integration of the new StrongARM-speed core taking longer than expected, plus some additional work required to work around bugs in Photodesk. The Aemulor team are making improvements to the final release version based upon users' feedback and experiences with the free demo version. Aemulor will be £50 + VAT.

www.aemulor.com

Photodesk goes 32-bit?

At the recent South West show, Dave Ruck from the ARM Club was tentatively showing a 32-bit conversion of the popular graphics package, Photodesk. While its not clear when or how this will find its way to Iyonix users as an upgrade, its good news that it is finally working on RISC OS 5. Watch this space for future release details!

New products and PCs from RComp

RComp have released a new product designed to allow a RISC OS user to drive a Windows PC over a network, directly from the RISC OS desktop.. The software works in a similar way to the PC card, allowing you to view and control windows software "in a window". It's even possible to cut and paste data to/from PC applications.

Because the software works over a network, the actual location of the PC is irrelevant, and can even be at a remote location, somewhere on the Internet.

The product includes pre-configured software for both Windows and RISC OS and a comprehensive manual, guiding you through the whole process step by step, ensuring that installation is quick and painless.

The software itself is based on two technologies called VNC and RDP, and comprises of enhanced versions of programs that can be freely downloaded elsewhere, but RComp's price includes the manual, simplified installation and telephone/email support.

The software, including manual and technical support, will cost £17.50 including VAT and UK delivery.

RComp do point out that running software this way is a little slower than running it natively on the PC directly because the graphics have to be sent across the network.. However, the slight speed hit is usually

outweighed by the convenience of allowing your RISC OS machine to drive the PC..

Given RComp are offering the facility to control a PC from within RISC OS, they are also offering "SpaceCube" PCs for those that require PC functionality, but don't have an actual PC.

SpaceCubes are very small computers about the size of a shoebox in brushed aluminium that provide full PC functionality and can run Windows or Linux. Each machine is individually hand-built for optimal performance and comes with built-in networking, USB2, firewire etc to make ideal "slave" machines for your RISC OS computer. They are also complete machines in themselves, and can be run stand-alone without using any remote control software.

Prices range from around £599 inc VAT for the low spec 1700+ machine with 256Mb RAM, hard disc, 5.1 sound, high spec graphics and so on, up to £900-£1000 for a high spec £2600+ machine. Prices vary depending upon specification, and RComp will do a quote depending on your specific requirements.

RComp will be displaying SpaceCube PCs at the Wakefield show and you can find out more on their Web site at www.rcomp.co.uk

Castle release Oregano 2

After many months presumably spent concentrating on Iyonix PC and RISC OS 5, Castle have finally released the long-awaited upgrade to their RISC OS Web browser, Oregano 2.

Iyonix PC users who get a beta/demo version of Oregano 2 bundled on the hard disc can upgrade by requesting a PIN from Castle, and downloading the full version via the Iyonix Upgrade utility.

Non-Iyonix Oregano 1 owners can upgrade for £49+VAT, while the full version is available at £84.26+VAT for users without any previous version.

Oregano 2 boasts some impressive features such as:

HTML 3.2
HTML 4.0 compliancy on supported elements
JavaScript 1.5 with DOM Level 0.
Secure Sockets Layer (SSL 3.0)
Cascading Style Sheets 1.0
Frames with frame history
Cookies
Secure Authentication
In memory session cache
JPEG (including progressive), GIF (including animated), PNG
WAV (including MS ADPCM), AU, MP3
Macromedia Flash 3.0 and 4.0
Unicode 8 & 16 bit, ASCII 7 & 8 bit, BIG5 - Chinese Traditional, GB / HZ - Chinese Simplified, JIS / SJIS / UJIS - Japanese, UKSC - Korean, TIS - Thai
Favourites
Output: Graphics and HTML
Customisable GUI

Artworks 2 gets more features

MW Software has announced the release of Artworks 2 will be put back to coincide with the Wakefield show in May. This is so that additional features can be added, in addition to the 32-bit conversion work being performed. This version will no longer be compatible with ARM2 and ARM3, so it will only run on ARM6 or higher, or in other words, it will require RISC OS 3.5 or higher.

Due to the massive effort involved, ArtWorks 2 will be released as a chargeable upgrade from earlier versions of ArtWorks. A full version of ArtWorks 2 will also be available as a separate product for those who do not have ArtWorks yet. The new name for Artworks 2 will probably be MasterWorks, which has an interesting and appropriate abbreviation.

www.mwsoftware.com

Select 3 details released

RISC OS Ltd has released details of some of the enhancements to RISC OS that the next version of Select might contain. Note these details are still provisional, along with the release date of end of April this year.

A lot of work appears to have been put into making RISC OS "skin-able" with user-customisable buttons and icon borders. This follows other operating systems, such as Windows XP, which allows desktop "themes" to change the look and feel.

While RISC OS has allowed you to change the "toolsprites" since version 3.1, which are the window borders and scrollbars, other items such as dialogue boxes, icon borders and buttons were always fixed in ROM. Select 3 looks like allowing the user to change virtually all aspects of the appearance of their desktop.

Other changes to improve networking performance, and user-friendliness (eg !Boot merge tool) should go toward making RISC OS an ever more attractive operating system. We note there is still no mention of whether any of the select features will be available to RISC OS 5 users with Iyonix PCs, which would be beneficial to both Castle and RISC OS Ltd if Select could be used on Iyonix.

Full details of the proposed changes are as follows:

- Some calls have been moved from the kernel to a new module called LegacyBBC.
- DragASprite no longer uses a 'drop' shadow when translucency is active.
- 'IconBorder' plugin system allows the default slabbed borders to be rendered in a customisable manner. FilterManager has been updated to support multiple icon border filter clients. Example bordering source code will be supplied.
- Internet, ShareFS and Freeway have had issues relating to large file transfers addressed.
- InetConfigure can now configure static IP addresses properly. Previous versions would retain the addresses stored in CMOS rather than using the new addresses supplied by the user.
- Internet module has had a fix for interfaces with no addresses never issuing service calls.
- DHCP client now supports address changed due to its deletion of the interface address. Previously this was not an issue, because Internet never issued service for address deletion, but now that this has been done it is now aware of this case.
- Rendering of sprites with 1bpp masks, using no scaling or colour translation, where the sprite data ends on a word boundary, but the mask data does not end on a word boundary, and the output alignment is not a word boundary due to a graphics window being present, now works properly.
- Attempting to delete !Boot will now raise a warning from Filer_Action.
- Attempting to copy a directory called !Boot over your !Boot directory will now invoke the boot merge tool.
- Should Filer fail to launch Filer_Action for a delete operation, the confirm deletes option is now honoured.
- When in EY0 modes, Pinboard now correctly sizes its background window on a mode change.
- In Filer, the Help option is now greyed if a directory and application combination are selected.
- Filer windows have been updated to be more style-guide compliant and to address issues raised by the use of icon bordering.
- SpriteExtend would fail to generate code when translucent sprites were rendered in paletted screen modes where the eigen factor was EX0 or EY0. This allows sprites to be

visibly dragged in such modes.

• FontManager can now safely resize its dynamic area. The version supplied in Select 2 had problems on certain systems which has now been addressed.

• ParallelDeviceDriver is now capable of reading Device IDs. This allows the auto-detection of the make and model of a connected printer.

• Toolbox DCS icons have been resized to be 'standard' size.

• TextGadget Scrolling list boxes now display associated sprites more sensibly when selected; previously these would be displayed lighter than the rest of the line. The text is now positioned a little further across the window, away from the sprite in order to reduce the tight look that had been created.

• Toolbox slider gadgets would respond to clicks and scrolls over the wells of the gadget even when the slider was set to be display only. They no longer react to such events.

• Pinboard configuration application can now be accessed its main menu. Optimisation for redraw speed of tiled ImageFileRender images.

• Scrapfile naming: Previously, when a network interface is active on a machine the ScrapDirectory is set to a Directory named after the MAC Address of the first installed Network card. If NetFS was active, this would be replaced by the station ID.

With Select 3, the scrap directory naming is now based solely on the hardware configuration, as detected by HWScan. For most users this will be disabled and so the scrap directory will be named 'Disabled'.

• Changes in configuration tools

Choices being changed, followed by closing the configuration plug-in, is now queried by the following tools: Pinboard, ToolOrder, Internal Sound, Sound frequency, Mouse scroll, Help, FileCoreCheck, NetFS, Econet, AUN, Routing, Resolver.

These tools should also indicate where a change has been made by placing a * in the title of the window.

• CPIShell is now able to be passed command line arguments to pass to the launched plug-in. This is used to allow installation of components through Filer_Action (dragging over !Boot).

• Screensavers: The screen savers supplied with DarkHorse and Hangfire have been converted to be used with the RISC OS 4 screen saver scheme.

• New IconSetUp Configuration Tool: The new IconSetup configuration tool allows the setting of options for the standard IconBorderRound module. The following options are supported for buttons and borders:

Rounded edges with Small, Medium, Normal or Large curves

Apply to (sunken) writeable fields

Enable 'special' colour schemes with choice of Foreground and Background colour for Action buttons, Default buttons, and Groups

All the above colours may be applied as solid colour or as a tint of the original colour. Furthermore button icons and information fields may have the colour applied as a Blend (top to bottom blend of the border colours, applying the button colour as a strong tint).

Button icons may have a rim highlight and may have either thick or thin borders.

• Networking: A new tool for configuring the proxies to use has been added. Changes to the interfaces can have immediate effect.

For more information on the RISC OS Select scheme, visit www.riscos.com

Mailscout upgrade

The next version of MailScout for RISC OS, version 1.12, has been released. The latest version of the application supports black-list look-up through SBL (the Spamhaus Block List). This means MailScout can be configured to check the source of your e-mails and automatically flag any that have originated from a known spam server on the SBL list. The SBL list is constantly updated by an international committee (more info can be found at www.spamhaus.org/sbl/index.lasso)

Also added to this version is the ability to view an e-mail's header as downloaded from the server by MailScout. This is particularly handy if you can't quite tell whether or not an e-mail is spam just from the summary display, and want to investigate further.

MailScout also allows you to interrogate your mailbox(es) and view a summary of the e-mails waiting to be downloaded on the e-mail server. You can quickly remove any spam, junk, offensive or otherwise unwanted e-mails directly off the server without having to waste time downloading them or risking virus infection on your machine/network.

A powerful, user-configurable filtering system allows MailScout to automatically analyse and highlight e-mails which it believes to be spam. Because this is user configurable it allows the application to be tailored to the needs of the user (different users receive different types of spam depending on who has their e-mail address).

A demo version of MailScout is now available from the Imagesoft Web site.

Although MailScout should quite happily work alongside any e-mail package, integration tools are provided with MailScout for Voyager, POPstar and DialUp users. For ANT users, the latest version of Paul Vigay's ANTutils now provides support for MailScout.

MailScout is available for £25 (fully inclusive of VAT and P&P).

Orders can be placed by e-mail (sales@imagesoft.co.uk), phone (01202 269720) or fax (01202 245268). All major credit and debit cards (including American Express and Solo) are accepted.

For more information please visit: www.imagesoft.co.uk/mailscout.html

New Pluto manuals

A new Pluto manual is an attempt to bring all the documentation for the well known e-mail and newsreader software into one place, originally based on the Docs files and the History files supplied by Jonathan Duddington, but with a great deal of information added culled from Newsgroup messages over the years, plus the experiences of several experienced users.

This has been produced as a StrongHelp manual for Pluto, and it has now been updated to include the additional facilities of Pluto v3. The manual has a total of over 210 StrongHelp pages, or over 120 A4 text pages..

The StrongHelp manual and a plain text version are now available for download from www.avisoft.force9.co.uk The HTML version should be available shortly.

In addition, the alternative Templates for Pluto have been updated to match v3.03e, and are also available for download.

Dutch RISCOS Expo

The Big Ben Club, the nationwide Dutch Acorn User Group, are again running their annual show for continental RISC OS users.

The show is an excellent opportunity for you to meet the RISC OS and Acorn enthusiasts on the continent and for exhibitors to promote your company and.products to a different market.

The show is on Saturday, June

21nd, 2003 from: 10.00 a.m. to 5.00 p.m. at: The Expohall, Hotel Mercure Buizerdlaan 10, Nieuwegein (near the city of Utrecht).

The location boasts a restaurant, free parking garage and rooms available for the night. The Show offers exhibitions/promotions by various companies, including Dutch, German and British Acorn/RISC OS dealers, demonstrations by club members, and so on.

Keep an eye on their website which will be updated regularly in the run up to the show: www.bigbenclub.nl

TEK and Viewfinder

The latest upgrade of the Viewfinder software, 1.52, has reportedly allowed TEK to run on machines equipped with Viewfinder cards with no visual problems as with previous Viewfinder versions.

More info on TEK can be found at www.artexsoft.com More info on Viewfinder can be found at www.windfall.nl

Verma upgrade

Verma, the module querying and information tool has been upgraded. Verma is a utility that displays detailed information about Modules that are located in memory or on disc.. For example, drag !Boot or !System to its icon and it will display details for all modules found there-in.. It will also indicate multiple copies of modules (irrespective of their version number).

New in version 0.20:

- Added a new window showing modules in ROM/RMA.
- 3 display modes : ROM only, RMA only, both together.
- As with directory scan viewers, the contents can be: saved as a text file; searched; A menu provides access to the usual array of module commands, along with the ability to extract ROM modules to disc.
- Directory scan viewers now also indicate: state of the 32-bit flag; whether a module is in the RMA, and its version.
- Added a new Module Detail window, listing individual SWIs and providing StrongHelp lookup.
- Added interactive help support.
- Recompiled to be 26/32-bit neutral.

Suitable for use with RISC OS 3.10 - 5, though does require the new 32-bit CLib on pre-RISC OS 5 machines. Verma, and many other software utilities can be downloaded from the author's Web site at www.argonet.co.uk/users/lenny/riscos/soft/

New contacts for Castle

Because of the loss of Castle's main Internet domain (castle.uk.co) their Internet contact details have changed.

Sales Email : sales@iyonix.com
Support Email : support@iyonix.com
Website : www.iyonix.com
with the original Castle website mirror at
www.iyonix.com/castle/

POPStar upgrade

Version 2.05 of POPstar can now be downloaded from: www.heenan.me.uk/acorn There's a full change log in the History file inside the archive, but the highlights are: 32 bit neutral (both 26 & 32 bit versions are included); and SMTP AUTH support. This version requires the 32 bit syslog and socketwatch, available from respectively:

www.compton.nu/syslog.html

www.heenan.me.uk/distrib/socketwatch/socketwatch004y.zip

PDF v2.01.1.11

Is now available for download from www.pdf.iconbar.com with the following changes:

- Upgraded to xpdf2.01
- Minor improvements in clipping paths
- Bug with hand pointer staying on fixed
- Named links fixed
- Help added to Misc menu

!PDF is a. PDF (Adobe Acrobat) file viewer for RISC OS.

ARM founder leaves ARM

Jamie Urquhart, formerly chief strategy officer and one of the original designers of the ARM processor has joined Splashpower Ltd., a startup that has set out to commercialise a planar form of inductive charging technology, as its vice president of licensing.

Urquhart was previously a member of Splashpower's technical advisory board, and now joins Splashpower as a part-time member of the management team.

"Jamie is providing us with a significant proportion of his time. We have a technology licensing business model. Jamie will work on tactical stuff; on refining the business model and on particular deals," said John Halfpenny, chief executive officer of Splashpower.

"Jamie brings a wealth of sales expertise and in-depth, personal contacts with senior management at companies in Japan, Europe, Taiwan, Korea, the United States and many other markets," Halfpenny added.

Urquhart said that he looked forward to working with a small company that would help enable wireless operation, which had also been part of the mission at ARM. Urquhart said that he would do some consulting back to ARM and that he remained on the board of directors of the Korean subsidiary of ARM as well as being on the boards of PicoChip Design Ltd., Antenova Ltd. and nCipher Ltd.

The essence of Splashpower's claims for its inductive charging system is that suitably enabled equipment, such as mobile phones and PDAs, could be recharged while they are resting on a 'SplashPad' at the rate they would recharge if conventionally connected, but without the use of a cable, or a cradle. This method of charging is already employed in electronic toothbrushes, where there is no physical or electrical connection between the device and its charger.

User group meetings

The next meeting of Surrey and Sussex Acorn User Group will be April 10th. Jack Lillingston, MD of Castle, will be talking about Iyonix from concept to delivery and plans for future development of the machine. He will also be talking about the Neuron range of embedded computers, their applications and possible use in desktop machines.

SASAUG meet in the lounge of Horsham Methodist Church in London Road. Meetings start at 8:00 pm. The venue has an adjacent car park and only five minutes walk from Horsham station. Visit www.poppyfields.net/sasaug for a map.

Wakefield RISC OS Computer Club

2nd April - 20th Anniversary meeting

4th April - 20th Anniversary Dinner for members only

7th May - Virtual Acorn in Action and shareware

10th May - Wakefield Show.

Full details from the club Web site at www.wrocc.org.uk

Southampton Acorn Users Group meetings: Normally the second Monday of every month except August. However the second Monday in April clashes with a holiday, so this April's meeting has been moved to the first Monday. Dates up to this summer will be: April 7th, May 12th, June 9th, July 14th



Quick recipes for single letters

Last month we started looking at various ways to use letterforms in more interesting ways unfortunately we also had a problem with our rendering of the letters.

This was due to a problem using Artworks to convert drawfiles into Illustrator files for the Macintosh. This time we have used a PD program called ArtToSpr, this converts Artworks and Drawfiles directly into sprites. We could use the Artworks bit image export options directly but for this job, where we are not editing, this utility is much quicker.

We have included last month' images as well so you can see what they were supposed to look like. Remember, each letter is changed in one or more of the following ways:

- Embellishing, where I have added a decorative device;
- Reversing out, where the letter is revealed against a stronger background;
- Manipulating, where I have altered the shape of the letter in one way or another;
- Enclosing, where the letter is enclosed within a rectangle, or other shape; and
- Objectifying, where the letterform is made up of other objects.

In one sense you'll be restricted by the fonts in your collection, but there are so many free fonts available that that's not really a problem. This month's letters shouldn't take long, and will hopefully inspire you to your own designs.

In all of these recipes, the letter should first be converted to a path, in Draw, Select->Convert to path; in Artworks, Control+N.

I Objectified

We've used the lower case "i" because the dot lends itself to being rendered as something else, and it will still read as an "i". In the example I've used a star shape to replace the dot, then copied the whole design, filled it with a grey and offset it to create a drop shadow effect.

The dot could be a sun, a ball, a flower, a spiral; anything which captures your imagination. If you're not happy drawing something yourself, delve into your clip art collection and look for a round object. Adjust it to the size of the dot and delete the existing dot (in Draw, click with adjust on the letter, select one of the points with adjust and press Control+X until the dot has been completely deleted).

J Manipulated

The J is often extended lower than the baseline, so I've elongated it by selecting all the upper half bezier points in Artworks and Control-dragging them to the required height. The resulting letter is then copied and offset slightly. I have combined the shapes in Artworks by selecting both and pressing Control+I. This isn't quite as easy to do in Draw, but it is possible by drawing the first J using the mouse, and on the last point click the Subpath icon and draw the second J.

K Objectified

One thing you might try is looking at letters in different ways. For example, looking at the spaces within a letter can suggest shapes or objects which can then form the background of the letterform. Looking at a serif K, I noticed that the inner shapes looked like leaves, so I drew up a leaf and placed it over the inner shapes. I rendered the letter in white and added a background so that at a quick glance the letter is easily read, but on closer inspection the leaves are recognised.

L Enclosed/Embellished

A classic serif L has been enclosed within a square with a border of the same colour as the letter. I created a diamond by drawing a square and rotating it 45 degrees. This was resized to fit the border.

M: Enclosed

A heavy sans serif letter needs a heavy, plain design. The M has been enclosed in a rectangle with a border, and the letter has been given a black drop shadow. Nice, simple, quick and it works.

N: Manipulated

The N has been given a distressed look as if it's old and worn. It's been done simply by adding sets of new points and dragging them to create the effect. In Draw, select the letter with adjust, then select a point. By pressing F7 new points are added; keep adding points to your heart's content and then manipulate them.

O: Objectified

The first thing that got my creative juices flowing was the simple geometric roundness of the O. I decided to give it a simple sun-ray effect by adding more geometric shapes. Use the rotate tools to make life easier.

P: Enclosed/Reversed out

A square was created and coloured. Then a long, thin triangle which was then copied along the square (use the blend tools. In Draw, create the first shape, copy it and place it at the other end of the square, group them and got to Select-Interpolate). The P is placed on top of the square.

Q: Manipulated

A heavy sans serif letter was chosen and converted to a path. I drew a rectangle over the shape and manipulated the lines to match the edges of the rectangle. The letter is still recognisable, but the viewer notices that something is not quite right.

Continued next month...

RISC OS without wires

Wireless networking is a big thing. Whether it is actually the next big thing is open to debate. In my list of priorities, born from personal experience, there are two important developments in networking currently.

The first is ADSL: whether you are in a place that can have it is a lottery. First you have to be close enough to the telephone exchange, at home I am not, at work I am. And the exchange must have been converted for ADSL. BT in its usual, irritating, way has now decided on a policy of "we'll only convert if enough people ask us". If you can get broadband you will wonder how you ever did without it. I know how I do without it every time I go home, but enough of my personal gripes.

The second thing you have to have in a modern network at the (small) office or in the home is a wireless LAN (local area network). Again from personal experience this is an absolute must you just lose all those horrendous wiring problems and you can move things around without any issues.

In the last issue we had a look at the technical issues in a wireless LAN and the (yawn) competing standards. This month we shall take a tour of what Stuart Tyrrell has to offer us in this line and also the eagle-eyed will have spotted an advert from Belkin, well we asked them to expand on their system to give us more idea what it's about although as yet we have no drivers.

Stuart Tyrell's range of wireless networking products enables RISC OS and PC machines to be connected since the products themselves are for PCs and Macs, Stuart has had the necessary drivers written to allow them to work on RISC OS. In addition this particular adapter works via the USB port which means, additionally, that you have to have a USB socket on your RISC OS computer.

The problem here, of course, is that if you have a Castle USB, either as a separate card, or as part of the Iyonix, this is not going to work currently. The STD wireless networking drivers only work on the Simtec USB card currently.

All products comply with IEE802.11b and interwork with other compliant systems. Transmission rates are up to 11Mbps, and 128bit WEP is supported. Security is always an issue with wireless networking, since someone could stop outside your house and tap into your network, in theory. Security ensures they can't.

Wireless USB adaptor

The wireless USB adaptor plugs straight into a PC fitted with a USB port, or into a RISC OS machine. The device can work "peer-to-peer" with other devices in "ad-hoc" mode, or use an access point in "infrastructure" mode.

What this means in practice is that you can either have a couple of machines just linked simply but effectively without any additional hardware. But if you, for example, have an ADSL connection and two or three machines it would be nice to have an network router with an ADSL modem. Which means that all network access goes via your router which has all the necessary software to connect to the ADSL when needed and protect your system from illegal entry.

Using the system this way does actually mean that an Iyonix can be brought into the equation by connecting a router type unit to the Iyonix directly and using the system in this mode.

The RISC OS version of the adaptor is supplied complete with full network stack based on Simtec's NET100 code and comes complete with RISC OS configuration program.

Wireless Access Point

This device can operate in one of three configurations, as an:

- Access point, enabling a wireless network to be joined to a wired network.
- Wireless "bridge", enabling a number of wired networks to be linked wirelessly.
- Media converter, enabling machines already fitted with network cards (such as NET100 or Iyonix) to be attached to a wireless network.

It is supplied with configuration utilities for RISC OS and Windows machines.

STD will also happily supply you with a wireless networking PCMCIA card, this cute little unit will plug into a portable PC and allows it to link to the network as well.

Prices

Simtec USB Podule	£99.00 (inc. carriage and VAT)
USB hub bought with USB podule	£10.00
USB hub when bought alone	£20.00
Wireless USB adaptor inc RISC OS drivers:	£79.95 (inc VAT and carriage)
Wireless USB adaptor for PC (no RISC OS drivers):	£69.95 (inc VAT and carriage)

54G from Belkin

Belkin Components was founded in 1982 in California. Since then, Belkin has experienced over 20 years of dramatic growth, now employing over 1200 people worldwide. The first European Operations were established in 1996 in Northampton, UK and currently Belkin markets in over 20 European countries. As one of the world's leading manufacturers in connectivity solutions for computer and consumer electronics users, Belkin's product range includes:

USB hubs, PCI cards and devices
FireWire hubs and PCI cards
Cables (computer, networking & AV)
Wired & Wireless Networking hardware & accessories
Bluetooth cards and adapters
Power products, including UPS & Surge Protectors
KVM switches & cables
Peripheral Sharing Devices
PDA and Mobile Phone accessories
Mobility Bags & Cases
Computer Accessories
Gaming Devices

Belkin have recently launched a comprehensive, quality range of 54g products including a Wireless Network Access Point (F5D7130uk), Wireless Desktop Network Card (F5D7000uk), Wireless CardBus Network Card (F5D7010uk) and a Wireless Cable/DSL Gateway Router (F5D7230uk4). Belkin's 54g products are based on the draft of the IEEE 802.11g Standard, which is due to be ratified by mid 2003.

The new technology is set to further the adoption of WLAN devices thanks to its numerous advantages, namely higher data rate speeds (approximately five times faster) and longer distances than 802.11a and 802.11b. Belkin's new solutions are upgradeable to the 802.11g and are backward compatible with the 802.11b Wi-Fi networking standards, come with lifetime warranty and free technical support and the wireless cable/DSL gateway router features 'G-only mode' to allow users to isolate their networks from 802.11b wireless clients and transmit data at the highest 54g data rate.

The new range of products include the unique Easy Install Wizard software which assist the end user with complicated information such as IP addresses and host names for connecting the router to the Internet, and takes the guesswork out of setting up a router.

For example, once the user inserts the CD into the computer's CD-ROM drive, the Easy Install Wizard takes over the job of determining what type of connection is being used and setting up the router to connect to the Internet Service Provider. Once the router set-up is finished, the user has an option to set up more computers, or just begin surfing the Internet. The Belkin 54g products also feature an industry leading Parental Control/Web content Filtering package.

"We are very excited to bring our customers these new products as they are set to make a substantial difference in both the consumer and enterprise environments thanks to their data transfer rate, ease of installation and of use," said Rob Falconer, UK sales and marketing director at Belkin. "Belkin is set to help the wireless evolution so that one day we will look at wireline networking the way we now look at those old room-sized mainframes and wonder how we ever coped with them."

On 54g

Belkin's 54g wireless networking products run at speeds of up to 54Mbps, operate on the same 2.4GHz frequency band as 802.11b Wi-Fi products and are backward-compatible with existing Wi-Fi-certified IEEE 802.11b products and other products displaying the 54g logo.

Belkin is confident that its 54g products will meet all current and future requirements of the 802.11g standard. However, should the certification change the principal operating features of its 54g products, Belkin will replace or upgrade any of its products at no charge.

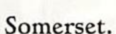
Pricing and availability

Belkin's 54g wireless products are now available in the UK, prices start from £54.99 for the notebook network card and the desktop network card, £99.99 for the access point and £119.99 for the cable/DSL gateway router.

For more information call our freephone number: 00 800 223 55 460 or visit our website: www.belkin.co.uk

The South-West Show

The RISC OS South West show took place on Saturday 22nd February at its established venue, the Webbington Hotel in



Somerset.

This was the first show at which Iyonix and Omega computers could be seen running literally "side by side" for visitors to experiment with, due to a useful juxtaposition on R-Comp's stand. Although MicroDigital did not have a stand of their own at the show, David Atkins and David Prosser had arrived just before the show opened. They brought four Omega machines and these were on show on the R-Comp, APDL and PHR Computers stands. They were also retained by the exhibitors for software testing after the show ended.

The four Omega systems seemed just as stable and reliable as the single systems we had seen demonstrated elsewhere, and were also improved a little further in speed terms. There was 2D acceleration in operation, essential when using very high colour depth or resolution, and already in use on the ViewFinder and Iyonix but it did occasionally seem rather jerky when moving application windows. Unfortunately, there were no Omegas available to "buy and take away" at the show, and there was no suggestion that systems were yet shipping to end customers.

By contrast, Castle's fairly large stand was doing brisk business, and I saw several customers leave the venue carrying away the distinctive Iyonix boxes. Jack Lillingston also gave a presentation in the show theatre (as did Paul Middleton of RISCOS Ltd, John Cartmell of Acorn Publisher, and a small "panel of experts").

Jack's slideshow, as usual, presented by a 32-bit version of Photodesk Ltd's OHP2 running on an Iyonix, was very similar to that seen at previous shows since the computer's launch (I covered these in past issues of Acorn User). However, there were a few changes; the entire presentation was run at 1600x1200 (with the projector interpolating in order to project the display), and there were other alterations, including a different background. More importantly, Jack also put a different emphasis in a number of quite important areas in what he said.

Jack admitted that the Iyonix systems on sale at the show (and those that had been sold before) did not yet have UDMA100 disk access running at full speed; this was expected "very shortly", to be available as a downloadable ROM upgrade for Iyonix owners. The UDMA100 functionality is already fully working on Castle's test machines, but Jack rightly pointed out that disk access is one component it's essential to test thoroughly before computers go out to customers, lest important data is corrupted.

In a quick insight into where development and marketing diverge, Jack answered a visitor's question "what does UDMA stand for?" by very honestly saying, "I don't know...does anyone else here know?" The main effect of fully working UDMA on the Iyonix will be that disk access will be far faster.

Other questioners elicited the information that there aren't yet any PCI cards compatible with the Iyonix other than the USB card and video card shipped with the computer. It was once again made clear that one or more third party developers are working on a PCI SCSI card for the Iyonix (this is the best way to maximum SCSI performance) but no information about a projected release date for such products was given.

Jack did say that Castle's own ethernet podules and USB podules were already working in the Iyonix. Only the network podule would really be of interest to the end user (since the Iyonix comes with ethernet and USB anyway), however it was nice to see at least some progress on the podule compatibility front.

Iyonix users also await news on Castle and Cumana podule SCSI cards working with the Iyonix podule interface; Jack suggested that the Castle SCSI card would be worked on when time allowed, and indeed that the Iyonix podule backplanes would only be reaching third parties this week. So, although software



developers have had Iyonix systems for a very long time (since June 2002, according to Jack), podule developers will have had to wait a little longer to test their hardware.

Jack had added to his presentation a selection of "Frequently Asked Questions" taken from question time at previous shows. Many of the answers pointed to Castle's desire to have a reliable and fully tested RISC OS system available as quickly as possible, rather than adding to the cost

(and delay) by incorporating add-ons that gave no noticeable benefit to the RISC OS experience, but did add to the complexity.

AGP graphics, a socketed processor (or a removable processor card), and a PC card were all things seen as adding huge complexity for the sake of little benefit to the average modern RISC OS user. On a more positive note, being able to burn CDs at a full 24x without worries is one advantage of the new Iyonix memory and I/O architecture.

The USB card in the Iyonix is a USB 2 compatible card, however Castle's implementation still only provides USB 1 so far. Jack said that USB 2 was possible in the future with a revised driver. Other improvements are taking priority over this, as the immediate advantages of USB 2 are relatively limited in practical terms.

Also featured in the Castle presentation was their enhanced development environment, discussed in more detail in previous show reports. This was available for £99 inc VAT at the show, a substantial saving, considering that the official price had risen to £199 after the expiry of Castle's initial special offer at the end of December 2002. (CJE were also offering the same package at the old price in their February 2003 price list, so perhaps the end of the special offer had a dampening effect on sales?)

In response to questions, Jack said that extending the ability of RISC OS to read and write file formats from other platforms was very important to Castle. He promised that Fireworkz (included with the Iyonix) would soon be able to read Excel workbook files, not just single sheet Excel files. It was hinted that this wasn't the only cross-platform improvement being worked on.

Jack was again asked when Oregano 2 will be available for those who don't own an Iyonix. He promised that this would happen very soon indeed. Strangely, the delay was apparently due not to any problems with the software itself, but due to delays in finalising and checking the mechanism for releasing and activating the software via the Web.

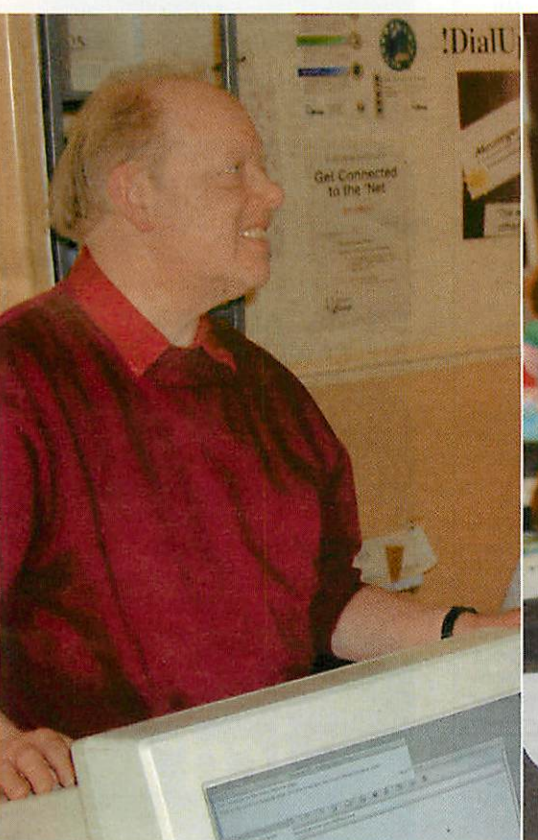
Asked about progress on RISC OS Select for the Iyonix, Jack said that discussions with RISCOS Ltd were taking place, but were yet to be resolved. He went on to say that Castle were putting a lot of effort into enhancing the version of RISC OS shipped with the Iyonix, that a great deal of progress would be made as a result, and thus "everything else will be left behind".

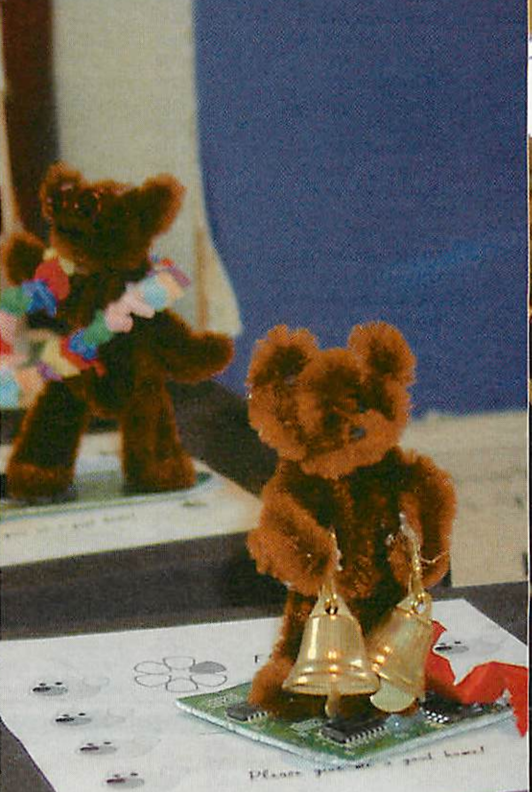
Following previous excitement on various Web sites and newsgroups about Castle's use of Linux code covered by the GNU Public License to assist them in developing the Iyonix's Hardware Abstraction Layer (HAL), Jack agreed with a questioner that this was now "a dead issue" as far as Castle were concerned.

Castle have now released the relevant software under the GPL, as the license requires, and Jack said that the Linux representatives with whom Castle have been talking were "very happy" with the outcome. He echoed quite a few people's opinions by saying the whole affair was "a storm in a teacup as far as I'm concerned".

Moving on to Paul Middleton's RISCOS Ltd theatre presentation, it was suggested that pre-releases of RISC OS Select 3 might be available for Select subscribers to download by late March, and that a Select 3 CD could then follow by April or May if the pre-release software worked well.

Paul's presentation focused on demonstrating some of the features being prepared for inclusion in Select 3. He did however mention that RISCOS Ltd usually prefer not to announce expectations for the release of specific features until they are very nearly ready. This is because long term development plans and priorities are often subject to change or delay, and it is better to avoid disappointment than to raise expectations unnecessarily.







Paul showed a number of new changes to the GUI, with the ability to configure the size, shape and colour of common buttons, change the colour of the text in Filer windows and of the background when an object is selected, change the order of Close and Iconise buttons on windows, and so forth. But it's also possible to turn off all these extras and stick with the original layout! In Select 4, perhaps due in late 2003, it should be possible to use graphic formats other than

sprite files in Filer windows and other areas where graphics are required.

Also in Select 3 will be the (optional) ability to have additional directories/icons on the icon bar functioning in the same way as the "Apps" directory does at present. Other small but useful changes include a !Boot plugin allowing the user to change the computer's clock without needing to load !Alarm, or alternatively to configure the computer to use NTP to synchronise the clock over the network with a remote time source.

RISC OS Select now has the capability to allow the user to change from networking using DHCP to networking with a fixed address (or vice versa) without restarting the computer. Another feature we were shown was sound frequency tracking, to help prevent different sounds being played at the wrong frequencies when using sounds from more than one sound source at a time using the SharedSound module.

improvements enabling future development or enabling third party developments.

One example of that in this Select 3 development work was the ability to read device IDs from devices attached to the parallel port, so that the computer can automatically recognise what sort of printer is attached and configure the printing system accordingly. The software for this automatic configuration hasn't been written, but this small extension to the operating system at least makes it possible.

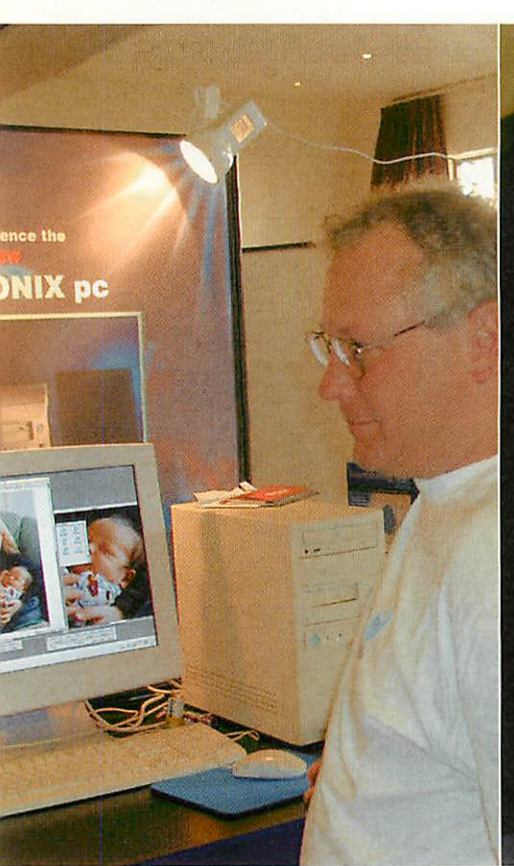
Paul's presentation focused entirely on RISC OS Select features, however question time focused on other matters. There were questions about why RISC OS was now seemingly being developed in different directions in two different places, and why Castle had licensed RISC OS for the Iyonix through Pace rather than through RISCOS Ltd.

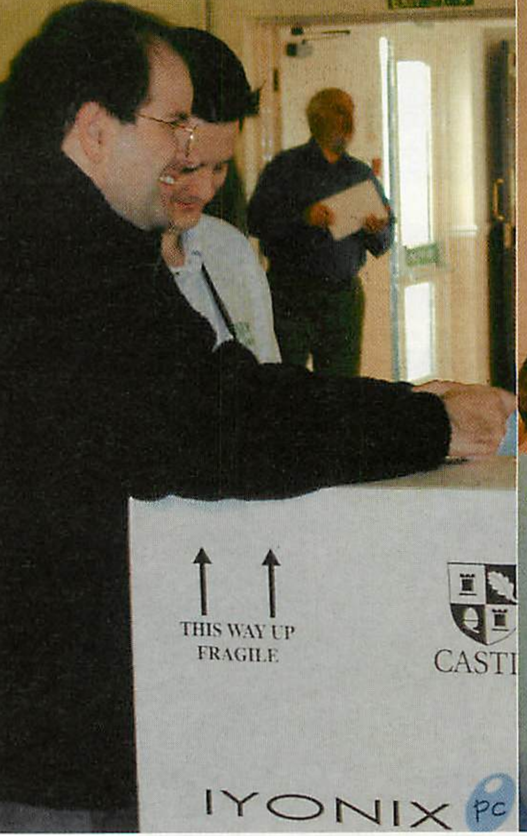
Paul had strong views on the situation, calling into question the

blame for the situation squarely on Castle and VirtualAcorn, saying "if people go off and do their own thing, it's very hard for us to force them to co-operate".

In slightly more conciliatory mood, Paul suggested that different RISC OS developments from different companies may not be as much a bad thing as some people fear, saying "if you believe in competition, competition means choice, and choice means having different things". But it was made very clear that he intended to take further action over what RISCOS Ltd sees as a wholly unacceptable situation in terms of licensing; so we shall doubtless be hearing more on this subject in the future.

The panel of experts idea is something that John Stonier has implemented at his shows for a long time, and this occasion saw Steve Turnbull, Andrew Rawnsley and David Ruck volunteering as the panel. Sadly these panels are often not too well supported by show visitors,







There was a great deal more, Paul had only received the development software from the Select programming team a few days before the show, and the textfile documenting all the latest changes looked very large indeed. As is often the case with Select, many of the changes were "under the bonnet"

legality of the licenses for both Castle's RISC OS 5, and RISC OS 3.11 being supplied with VirtualAcorn. He insisted that the appropriate route for anyone supplying RISC OS for desktop computers is to license it through RISCOS Ltd, describing any other approach as "anarchy". He placed the

including on this occasion. Part of the problem may well be that questioners' interests are so wide-ranging that parts of the audience may feel several topics to be of little direct relevance to them. Even so, it is a pity that this concept doesn't seem to have taken off.

With the two new high end desktop

computers, Iyonix and Omega, looking set for fierce competition as to which will sell better to the existing RISC OS market, it was interesting to see different dealers and developers making choices as to which of the two computers they would sell and support. As I've already mentioned, R-Comp were hosting both systems on their stand, and indeed were demonstrating a wide range of their own software on both (I was told that Webster XL is faster than Oregano for some things when running on an Iyonix).

I didn't confirm that the other companies exhibiting the Omega but not the Iyonix (APDL and PHR) would only be selling the Omega, but it seemed likely. On the other side of the room, it was intimated that CJE Micro's Chris Evans would only be selling the Iyonix, and not the Omega. (I made the assumption that Castle themselves would also only be selling the Iyonix). There was a completely different approach from ExpLAN, whose price list featured Risc PCs, RiscStations, and A7000+ systems, but not the Iyonix or Omega!

Among other exhibitors, I should note that The ARM Club do not have plans to sell either computer, and presumably do not hold any vendor preferences as an organisation. However, their stand featured an Iyonix showing some of the leading edge work done by David Ruck and other club members to help ease the transition from Risc PC to Iyonix PC; and other ARM Club committee members were very much in evidence purchasing Iyonix systems.

It was here that one of the major news items of the show came to light. At 11:01am, David Ruck revealed to Jack Lillingston that the Iyonix on the ARM Club stand was running Photodesk without any form of emulation whatsoever, i.e. at full speed. In true "accelerated grapevine" fashion, Jack relayed this to me ten seconds later, and the news then reached interested parties in London by 11:02am, just as Jack was beginning his theatre presentation.

The significance of this is that a great many RISC OS users spend a large amount of their time, sometimes all of it, using Photodesk and little else. A number have said that the Iyonix is great news, but they themselves cannot justify purchasing it while they would still be using an application under emulation for almost all of their time (even despite the other advantages). Under these circumstances, a running 32-bit version is a major breakthrough.

However, the details of this breakthrough are worth noting. The version of Photodesk running natively on The ARM Club's version had been reverse engineered by David Ruck, rather than being based on the original Photodesk sources. This means that it is very far indeed from being an "official" version, and certainly could not be released immediately.

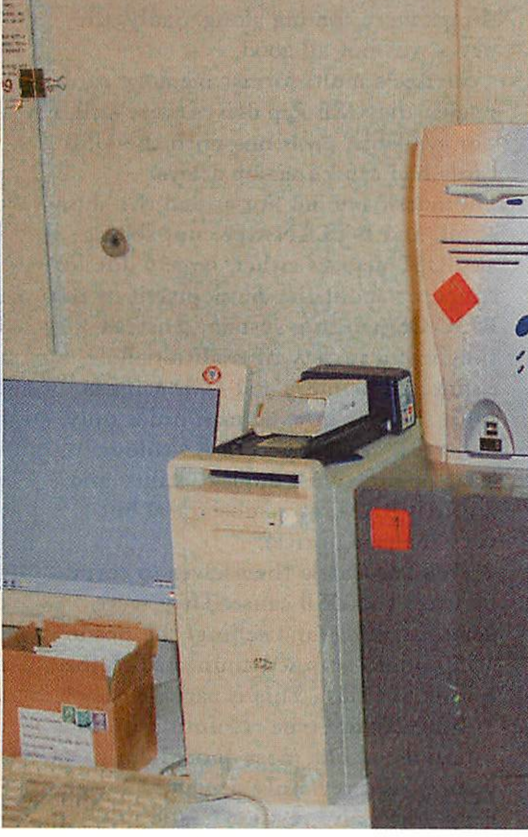
Provided that David and Photodesk Ltd reach an agreement about the distribution of the 32-bit version, there should be no problems. After all, the copyright for the software resides with Photodesk Ltd, David did mention the possibility of releasing "a huge patch" to make existing versions of Photodesk 32-bit compatible, but said that this would probably not be the best approach.

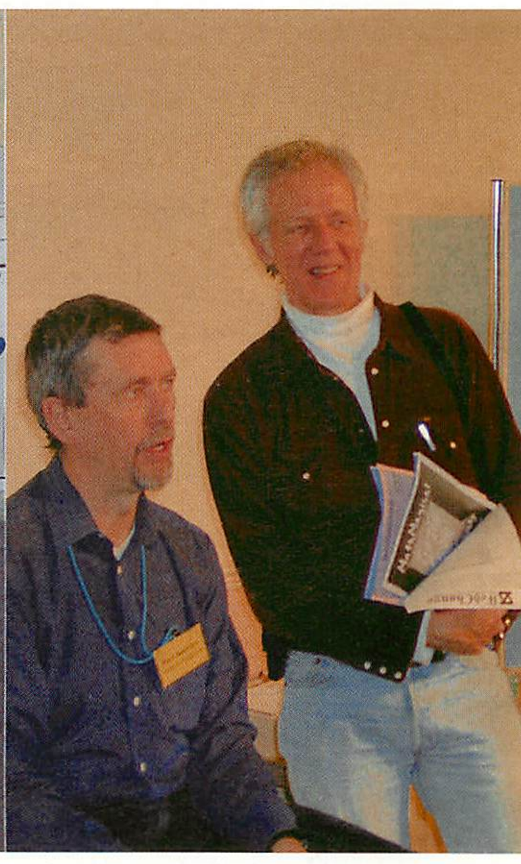
Once an agreement is reached, probably by the time you read this, work can start on merging the 32-bit compatibility changes back into the original Photodesk sources, so that any future developments will also be 32-bit compatible. (David commented that Photodesk itself consists principally of ten core BBC BASIC files, each containing large amounts of ARM assembly language, so incorporating the necessary changes into the original code shouldn't be too difficult.)

Software that was released at the show included the new version of VirtualAcorn (VirtualAcorn 1.4). This included direct access to all sorts of media, for example the ability to run Acorn format CDs directly on Windows 2000 and Windows XP, and to access a variety of other CD formats under the emulated RISC OS. New screen resolutions and new "ColourCard style" acceleration are also featured, as well as a wider software package for VirtualAcorn buyers.

R-Comp were demonstrating



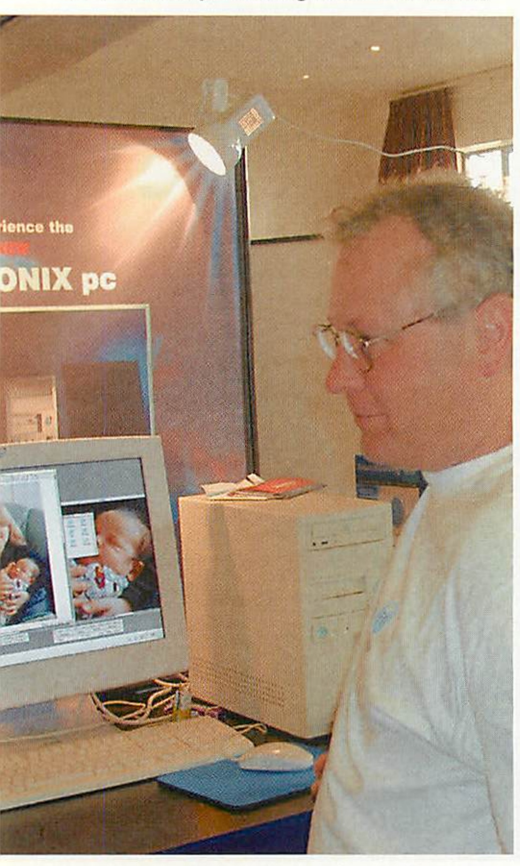




Remote Control, their new combination of VNC and RDP facilities to allow RISC OS users to run and view Windows applications remotely on a networked Windows system via a RISC OS desktop. On their stand I also found a SpaceCube; a miniature AMD-powered PC for Windows or Linux in a very small and fancy-looking brushed aluminium case with blue LEDs (just like the larger instantiations of my SunFire SPARC RISC computers) and other niceties.

R-Comp see these SpaceCube computers as the ideal adjunct to UniPrint (their software for printing from RISC OS via the Windows operating system's much more extensive printer drivers) and to Remote Control, rather than a move to supplying traditional PC systems.

R-Comp also had more representatives on their stand than any other exhibitor; but the CJE stand, wireless networking among their new releases, was certainly the largest at the show,



occupying almost half of one side of the exhibition hall. The RISCOS Ltd stand took things to the other extreme, with more than half a dozen computers, several tables, many posters and a bewilderingly wide variety of products, mostly only manned by Paul Middleton himself.

Exhibitors with important links to the South West included Vince Hudd (Softrock Software) with a 32-bit Iyonix-compatible version of Webchange 2; and the Cartmell clan, with Acorn Publisher as well as Fleur Designs products, including the return of the very well received "RISC OS bears" (tiny soft toys in presentation boxes, accompanied by pieces of circuit board and items to represent one or another RISC OS company). Also based in the South West were David Snell with ProCAD+, and StrongARM Systems.

Other regulars included Zenta Multimedia, Fortran Friends, Icon Technology, Serious Statistical Software and Archive magazine. I had a suspicion that the Internet cafe might have been sponsored by Castle, and was pretty sure that the games arcade was sponsored by R-Comp; but the show guide had become a mere shadow of its former self, and confirmed neither of these things.

In recent show reports I've mentioned the progress (and sometimes lack of progress) in the availability of USB-compatible devices for use with RISC OS machines. Nearly a year after USB cards first reached RISC OS developers, I was keen to see how things were coming along. Sadly, the news was not all good.

Surftec's multi-format memory card reader and USB Zip drives were still not available; problems with the USB cards had caused major delays. Photodesk Ltd did not attend the show at all, and ExpLAN were not selling any USB devices either, largely due to concerns about the development of the RISC OS printing system. (Instead they had a variety of traditionally connected printers and LCD screens, with the star buy, by mail order only, being a B-grade Kyocera A3 colour laser printer with duplex facility and 256MB RAM, at a substantial but very tempting price).

This left Castle themselves to carry forward the USB cause. They were demonstrating (and selling) the Epson 1660 photo scanner, connected to the Iyonix via USB. This is capable of 1600x3200dpi true resolution (not interpolated like most quoted dpi values), and certainly produced some very impressive results. Castle were also demonstrating and selling inkjet printers driven via USB, as well as showing off the print-outs from their chosen models, which looked impressive.

It was hard to make an absolute judgement about whether the show was quieter than in previous years. Jack Lillingston's talk was very busy and seemed just as well attended as two years ago, but at other times the venue, large anyway, was rather empty. (As in previous years, the show seemed deserted, and abandoned by exhibitors, at 4pm, despite the official 4:30pm closing time). Exhibitor turnout was also worse than in previous years, with notable absences including RiscStation and Cerilica.

On a more positive note, it was good to see new software, and a completely new exhibitor, making an appearance, with Martin Hansen taking a stand for his MathMagical Software Company. The main product on show was TurtleChalk, slated as "due for release in September 2003". The date may seem, at first glance, to be a case of planning ahead much more than some RISC OS developers; but Martin is a teacher, so perhaps he is realistically estimating that July and August will give a lot more time for software development than the rest of the year.

Although TurtleChalk is essentially "a LOGO style drawing application", Martin has much grander plans for it than this might imply. His ideas are largely based upon his own school's mathematics department, where by September there will be fourteen Risc PC systems with multisync monitors, purchased secondhand at a huge cost saving. Martin's vision of maths education sees pupils using TurtleChalk daily, the software providing not just scripted drawing capability, but also pictures, diagrams, worksheets and teaching notes.

Martin's theory includes a reminder that Internet access, and perhaps multi-tasking desktops full stop, are more of a distraction than a help in most maths lessons. Whether his more ambitious aim of replacing photocopied worksheets with a Risc PC for every pair of pupils will receive widespread acceptance in the rules-bound and slothful education sector remains to be seen; but either way, these are exciting developments.

As always, the show venue was spacious, well lit and reasonably well signposted. The catering was better, and indeed healthier, than quite a few RISC OS shows, with reasonably priced food including quiche, salad and jacket potatoes (there was also a bar). Although it is in a rather rural location, the Webbington hotel is not too far from the M5 motorway, and so really quite easy to reach. And, as a user group member two hundred miles away commented, "it's also a very nice part of the country for a quick weekend away".

dgs
dgs@argonet.co.uk

Conversion tools

RISC vs Windows

Although Windows doesn't have any conversion tools as such, most of Microsoft's software does provide 'save as' dialogues which allow one to save files as different types. The file types that can be saved are limited by the software, but additional conversion scripts can apparently be obtained.

RISC OS ChangeFSI on the other hand allows one to 'drag and drop' an alien graphics file type into it and also save it as another type. ChangeFSI is mostly similar to Microsoft's Photo Editor that provides for conversion of picture file formats.

A program called Creator is also available that allows creation of PC format files from Acorn equivalents, and InterGIF allows creation of a GIF file from Draw images, in a variety of formats.

MS Office software

There are no bundled packages like MS office available for the Acorn machines that I'm aware of, though there are separate companies selling equivalent software. It's really beyond the bounds of this article to detail the differences between them (and especially as I don't have all the RISC OS software for a comparison). I have however compiled a simple list of equivalent RISC OS functions:

Microsoft	Acorn
MS Access	A database program like DataPower is the nearest match
MS Word	EasiWriter or TechWriter from Icon Technology
MS Publisher	Impression Publisher Plus or Ovation Pro
MS Excel	Schema 2
MS Outlook Express	Messenger Pro or Pluto a
MS Internet Explorer	Oregano 2 or WebsterXL, though these products are necessarily behind in Web page interpretation.
MS Photo Editor	Photodesk or Scanning and manipulation software (David Pilling, was called ImageMaster), or ChangeFSI
MS Powerpoint	OHP2 from Photodesk and NoticeBoard Pro from RGSC

MS Word is Microsoft's most well used program. I personally consider it a pig to use, and often use Notepad or WordPad in preference to it, though one can do a great deal with it if one persists. I personally would prefer to use Impression or Ovation Pro.

Programming

Microsoft software provides a mini-version of their programming language Visual Basic, called Visual Basic for Applications (VBA). This allows you to create "plug-ins" for programs like Word and Excel. Also VB programs can be written to create (say) an Excel spreadsheet. It is through this language, however, that viruses are often introduced into PC systems.

There is no direct equivalent on the Acorn platform, but BBC Basic or C programs could be used to generate files, which can then be loaded.

CDs

The CDPlayer application is a good piece of software, and can be used to keep a CD catalogue. Like most PC software it has its niggles, when discs are swapped, it sometimes doesn't recognise the new disc, or takes a long time to do so.

Acorn machines can read PC format CDROMs. Although it's not terribly visible, RISC OS does have a CDPlayer function. To use it, you pop in a Music CD, and double-click the CD icon. The icon changes to add a musical note, and the CD plays straightaway. So far as I'm aware there's no way of skipping tracks, it just plays the entire CD.

There are shareware programs to drive the CD-ROM such as KeyCD which, allows a combination of keystrokes to be used to skip tracks (apparently this can be used while playing games). SmartCD and SmartCD+ (commercial version) provide the equivalent features to Windows' CDPlayer, and the software author has cleverly translated the 'disc' of the 'compact disc' logo to 'compact risc'!

Internet

The Internet is almost exclusively dominated by Microsoft Internet Explorer, though there are other PC browsers out there, for example Netscape and Opera. In my experience Microsoft have even added features to prevent Web pages generated with their FrontPage software working on Netscape, or in fact anything that isn't MSIE.

The Internet is available on RISC OS machines, but it's worth bearing in mind that we are inevitably a few steps behind the PC. There are two clear Internet browsers for the Acorn platform, Oregano and Webster XL. Oregano is generally regarded as the best, but there are a lot of useful features in Webster XL. I use the old Argonet Fresco browser when I can, although it's not capable of providing the support to modern Web sites (i.e. Javascript) that Oregano and Webster XL have, I feel it's a better product for my needs unless I need to access these sites.

There's no way I could possibly cover all the ins and outs of using the Internet on an Acorn machine. I feel the Acorn software is more reliable than Microsoft's Internet Explorer albeit less functional on some sites. Until recently tesco.com didn't work on any of the Acorn browsers, but now they've added a text-only version of their shopping site at www.tesco.com/access, so the Internet grocery shopping is available to we Acorn users.

This change is actually part of national legislation that requires web sites to be accessible by the partially sighted. Hence you will see a huge upswing in the number of sites offering text access. Those not providing it, if they are located in EU countries or the USA, are probably breaking the law.

Task Manager/Task Display

Windows is apt to suddenly throw a fit without warning. Sometimes multiple copies of programs are said to be 'running' although they're not really. The Task Manager software is absolutely invaluable on Windows to kill tasks (mostly MS Word) that have got their knickers in a twist often resulting in lost work or damaged files.

RISC OS seldom fails, but does also have the functionality to kill tasks in the task display (accessed via 'Acorn Nut' or RISC OS4 logo) though I've

seldom needed to use this facility.

Recent versions of the operating system, also have the watchdog software which allows you to interrupt matters with an Alt+Break. From here you can step through the running programs and kill off the offenders in a hang.

CPU Usage

Window's Task Manager also has a graphic display indicating processor activity. Acorn's equivalent of this is called Usage (App2 disc).

Memory Management

Windows' memory management stops at Task Manager: to kill or not to kill? Windows NT even has the gall to not run programs when short of memory, it doesn't say anything, but when other programs are ended, and the user tries again, it miraculously works.

RISC OS has a superb memory manager (Task Display) whereby screen/font memory (among others) can be increased by merely increasing the size of the thermometer bar in the Task Display. These can be set in Windows I believe, but it's not simple.

The Windows registry

Windows contains details of its software in an area called the "registry". This contains details pertaining to locations of files/data areas and other software information like GUIDs (Global Unique IDs). The registry is both useful and complicated, and awkward. Removal of programs from Windows can result in damaged registry entries which can be make things really tricky to eradicate the complete problem.

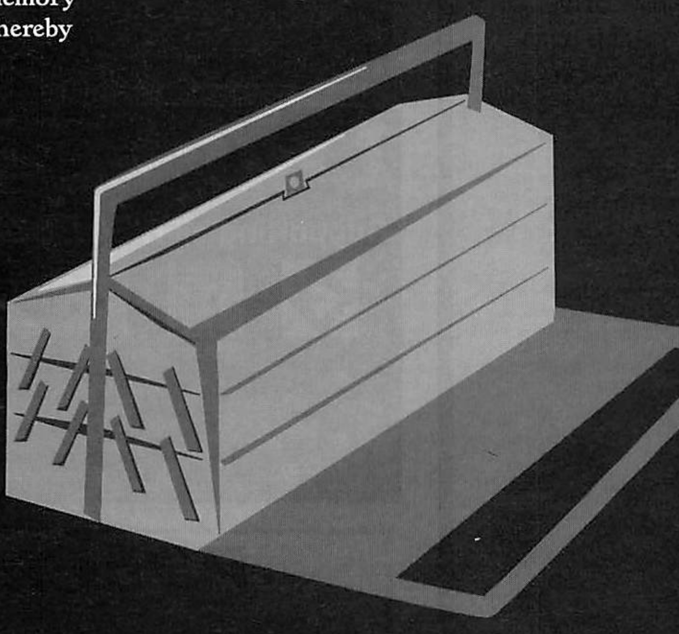
RISC OS doesn't have anything like the registry, thank goodness.

Compression utilities

Although not a 'standard' Windows program, compression utilities like PKZIP, PKUNZIP, PKZIP for Windows and WinZip have now become such an everyday part of PC computing and for Internet downloads, that I thought I should mention them here. PKZIP et al are (or were shareware), and modern (ie non-DOS versions) ask you to register them. The DOS versions work equally well on a Windows PC system, providing you get the hang of the command line interface.

RISC OS has its own standard !Squash utility that will allow compression of a local file, good if you're out of disc space. Squashed programs have to be unsquashed with Squash, and cannot be seen without doing so. There is also the popular ARCFS2, which is a native archive filing system.

The superb !SparkPlug application which was written by David Pilling allows most PC and other compressed file formats (including ZIPs) to be decompressed on an Acorn. I don't think it can be used on files split across floppies, but I have been told of a program called Split to split across floppies, or ZipSplit for 'each part to be readable on its own' (probably could be used with PC ZIP multi-floppy archives) though I haven't tried this personally.



Usability

Windows seems to assume that the user has an extremely technical knowledge of the system and has some very cryptic, and extremely unhelpful error messages such as, after deinstalling programs:

"Uninstall completed. Some elements could not be removed. You should manually remove items related to the application". How in heavens' name are you expected to know what items need to be 'manually removed' if you have no knowledge of the software or of the intricacies of Windows?

Again on deinstalling software, Windows comes up with errors like "The file 'Win234fd.dll' is in use by other programs and cannot be removed. If you wish to deinstall this component please find where it is used before doing so." Oh yeah, and how do you find this out? You need to be very technically minded to even understand where to look!

In my experience of using PCs in business, if you let a Windows PC run continually for a number of days, instead of switching off every night, it starts collapsing on you, eventually leading to a forced reboot, because the damn thing just can't be used.

Usability is not one of the strongest points of a PC, everyone knows that Microsoft software, both OS and applications have bugs. Some of these bugs are very serious. And yet it is perfectly okay, apparently acceptable to sell it and for people to buy and live with it.

Would you buy a car that was known to conk out if taking a gentle motorway right-hand bend? Or would you buy it (just because everyone else has one) and then choose motorways that didn't have right-hand bends?

In fact it is frightening that the above paragraph actually does describe the situation as it is today in the computer world. Anyone who works in a PC-laden business environment knows how much time is spent fighting problems these machines develop.

Well the next exciting episode is the last one of the series in which I will finish up on the software. And that, as they say, will be that.

Andy Burgess
(ajburgess@argonet.co.uk)

Part 15: Getting into print

Printing in S-Base is another huge area and even though we will cover quite a lot of it in this part of the series there is much more to it. I am actually going to look at it completely separate from MediaTrack because there are principles and ideas that



need to be covered that won't apply for this application.

There are two basic methods of printing from S-Base, they have their similarities but one is the quick and easy way, and the other allows almost complete control of how things appear. In fact, from S-Base, you could access the printer directly as well but that is completely unnecessary.

Quick! Print!

Let's look at the fast way first. In many ways it resembles how you put a card on the screen and poll it until you get a click to exit, this would be:

```
card new chandle,"card format"
card show chandle
card poll chandle
card dispose chandle
```

Printing in S-Base is done via reports and creating a report looks like this:

```
report new rhandle,"report format"
report show rhandle
report run rhandle
report dispose rhandle
```

There is a certain similarity between the two, as you can see. However this will not actually print the report, what it does is create an on-screen report. You can then print from a menu option off the on-screen report. Printing can be done automatically but more on that later.

Report formats

The first step is creating a report, this is done in the formats resource, see Figure I. The fundamental difference between a report and a card is that a report does not need a template, and the next important difference is that you have to include special print areas which define parts of the page, these are:

page, page header and page footer
column, column header and column footer
entry

These areas, as defined on the screens have completely gross colours (Figure II), but they are not printed, they are for formatting purposes only. You can redefine the colours if you fancy something a little more aesthetic.

In a card it is not usually critically important the order in which you create the various elements of the page. However it is very important for reports. S-Base scans the format elements in order to place them and they have to be correct otherwise items will not appear (Figure III).

So, for example, if you have something which will only appear in the page area once on each page of the report (an outline box perhaps, or some text) this must be placed directly on top of the page area entry.

Up to now I have only really looked at the graphical display of formats when they are being designed. You get to this by Shift + double-clicking the entry in the resource. If you simply double-click you get a simple text listing of the elements of the format. You move elements around in this list simply by dragging them (Figure IV).

The other point to note is that in the definition of the entry there are two menu items, the first is the type of the element (area, prompt, field or whatever) the second is the area that it belongs to. Not something we worry about with cards but in a print format each prompt, line, box or field needs to have this set to the type of area it refers to (Figure V). And then it needs to be positioned sequentially below the exact area it belongs to.

The correct sequence is
Page
Page header
Page footer
Column
Column header
Column footer
Entry

You can also have multiple entries each with their own associated fields, though not with the basic quick print.

Getting the data out

A quick print report also needs a single handler (and handler set to go with it) this calculates the information for the next entry to be displayed when requested by the printing system. This is the "Request entry" handler and when it is entered the function "@entry" returns the number of the entry being created.

Don't make a mistake here, it is not a record number, the system is just telling you that it wants to create entry number X, what X means is entirely up to you.

In the simplest type of report, let's say you are printing a set of names and addresses from an entire file. In this case X will be one less than the record number because entries go from 0..max-1 while record numbers go from 1..max. The Request entry handler might look like this:

```
if (@entry < @recordcount(address))
    load address,@entry+1
  else
    report exit run rhandle
  endif
```

All very simple. Now in any sensible database you will be deleting records and perhaps only want to print a specific subset of the file. So a more realistic Request entry handler would assume that you have created a Query containing all the valid records you want to print before you start the report, and would look like this:

```
if (@entry < @ext(qhandle))
load address,@bget(qhandle,@entry)
  else
    report exit run rhandle
  endif
```

In this case we don't need to worry about the "+1" when loading the record because queries run from 0..max-1 as well. To print immediately use "report run print rhandle", and leave out the "report show rhandle" command.

The alternate method

It is quite clear that the quick print method, though simple, is not versatile. What if you want a different type of entry depending on the item you are currently printing out?

In our database example we have several different types of record and maybe you want to have a printout which is a list of singer-songwriters,

and then list every recording you have of theirs. So you would have the initial entry for the person, say Sheryl Crow, and then one or more album titles: Tuesday Night Music Club and The Globe Sessions, say.

How do we do that?

What we don't use is "report run" instead this is replaced by repeated use of the "report insert" command. Let us say we start with two queries, one of them is a list of record numbers of the singer-songwriters we want to print out. The second query is one we can run that will generate the list of albums this person has published.

In the print format we are using we create two Entry areas, one called "Singer Entry" with the necessary fields for this information, and the other one is called "Album Entry" for obvious reasons.

For this type of report generation we don't need any kind of handler, this sort of thing is generated as we go along. In fact you could even play "polling" games and generate the report while multitasking and doing other things.

Anyway, the code should look something like this:

```
query new shandle,"singers"
query new ahandle,"albums"
report new rhandle,"singer report"
query run shandle
ffor x=0 to @ext(shandle)-1
  load attrib,@bget(shandle,x)
  report insert rhandle,"Singer
Entry"
  query clear ahandle
  query run ahandle
  ffor y=0 to @ext(ahandle)-1
    load medium,@bget(ahandle,y)
    report insert rhandle,"Album
Entry"
    next
  next
report exit rhandle
report dispose rhandle
```

Once again you can see that this is not complicated either. The whole printing process is very simple indeed. One important feature of the S-Base printing process is that each page is actually a drawfile, this can be saved out separately while you are browsing the pages before printing.

Since the original version 2.2 of S-Base was launched there have been considerable improvements now reaching version 2.4i. There is a version 2.5 but this is a complete re-write and although it will import earlier versions (including MediaTrack I am reliably informed) it has not yet been released.

In this later versions of the software even more printing enhancements have been made which I will now look at briefly just to round out this article in the series.

S-Base allows text only reports to be created for fast printing. However this method originally bypassed the printer drivers, an early change allows a configuration option to output text-only reports through the printer driver.

There is a field type which I haven't yet covered which allows you to have any length of text. This could not be printed in the original version, but can be now. The text will be fitted as necessary into the available space in the entry and the entry repeated if needed to include the text. As this may look ugly it is recommended you use the "report insert" method and have a special entry area for free-form text fields.

The next new report enhancement is a special handler which is called when a new report page is started (use the "enter entry" handler), "field entry" is called at the top of each column, "field exit" at the bottom of each column and finally "exit entry" at the end of the page. The two "exit" routines cannot have "report insert" in them because the page/column would already have been filled.

Three functions were also modified to allow extra facilities and control:

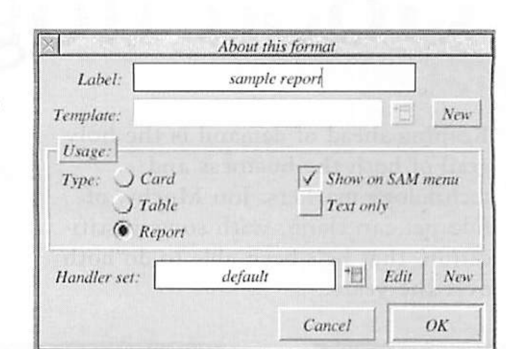
@ext(report_handle [, element]) this allows youn to find out the actual physical height of different areas of the report. You can then see if things will fit.

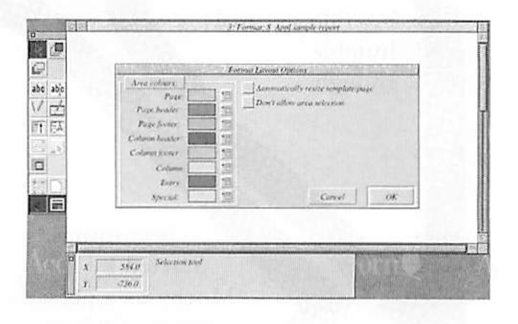
@ptr(report_handle [, element]) there is a concept of the next position for inserting an entry into the page. This function allows you to find out where this next position is relative to the given element.

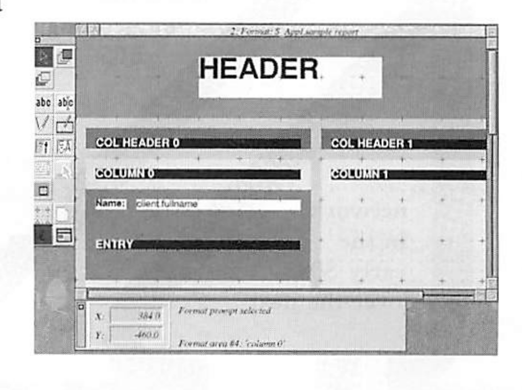
@element(report_handle) returns the current column being written to.

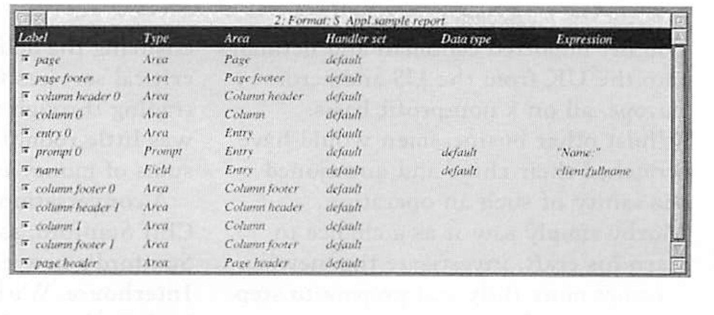
The final change is the "report fill" command, basically this assumes that a page has already had a few entries added to it. This command allows the entries to be moved around between columns and balanced out, "vertically justified". This is a way of tidying up the last page so that it looks nicer.

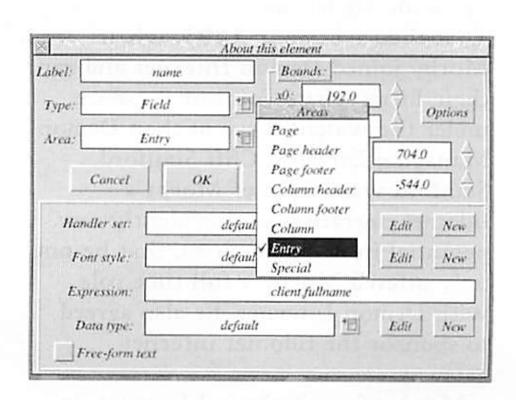
That's it on the printing, we should finish next time with just a few additional noted and inclusion of a generalised printing system.











Good doggie

Keeping ahead of demand is the holy grail of both the business and technology markets. Jon Morby, of fido.net can claim, with some justification, that he's been able to do both over the years.

K

fido.net had humble enough beginnings. Started by Morby as a pet project of his to assist the burgeoning BBS network in the early 80s, over the next decade, fido.net imported echomail and netmail into the UK from the US and across Europe, all on a non-profit basis. Whilst other businessmen would have scratched their chins and questioned the sanity of such an operation, Morby simply saw it as a chance to learn his craft, investigate the 'new' internet more fully and prepare to step up to the big league.

That chance came in 1993, when Morby joined Demon Internet and ran their Birmingham Point of Presence, under the watchful eye of then-Demon Managing Director, Cliff Stanford. Stanford was aware of Morby's fido.net operation, and evidently saw potential in it. So much so, that he not only offered Morby a full time role with Demon Internet, he also agreed to sponsor the fido.net internet gateway.

Moving from Technical Support up to Operations within a short space of time meant that Morby was again dealing with mail. But this time, rather than fido.net mail, he was responsible for the entire Demon Mail system. Not exactly a small operation, given there were over 100,000 paying customers all using the system and reliant on Jon's abilities to juggle several balls at once behind the scenes. As well as his responsibilities to Demon Mail, Morby's expertise was continually called upon to deal with other Operations issues. This ability to project manage saw him swiftly rise through the Demon ranks and, by 1997, Morby had moved into the Senior Management team at Demon Internet, taking on the post of Advanced Technologies Manager, which gave Jon the chance to let his blue sky thinking guide several company policies and operations. Following Demon Internet's sale to Scottish Telecom (now Thus Plc), Morby left the firm to pursue several disparate internet projects before joining Internet Investor International (I.I.I.), a trading start-up that desperately needed someone with Morby's talent and vision.

Responsible for the operation and smooth running of the III website and internet trading systems across the UK, Hong Kong and South Africa, Jon's remit included ensuring the delivery of mission-critical services from real-time stock trading through to stock alerts. There was little room for error, given the sums of money involved.

A conversation with his old boss, Cliff Stanford, saw Jon move to Stanford's new company, Redbus Interhouse. With the lessons learned both at Demon Internet and I.I.I., Morby was a significant contributor to the company's growth, but knew something was missing.

Coming full circle and concentrating on fido.net was a logical step. With all the experience garnered in so many varied internet arenas, it made sense for Morby to go back to basics and give fido.net the attention it deserved. After 18 months with Redbus Interhouse, Morby decided to take the plunge and left the company to concentrate on fido.net.

Applying over a decade's hard learned lessons to his pet project not only meant Jon could take the company to the next level, it also meant he was back doing something he genuinely loved, and doing it for himself. At the time, fido.net was almost entirely dormant, serving fewer than 20 customers.

Today, just over 12 months later, fido.net is a thriving business, with over 1000 customers using its services. fido.net has grown from a humble mail provider for the BBS network into a fully-fledged internet operation. Its customers have access to a full range of services from fax and email through to web hosting, and fido.net's latest product is possibly Morby's favourite to date. Designed to rival Hotmail, fido.net are now offering email hosting with a customer's own domain, anti-virus and Spam filtering from just £19.95 a year, including VAT, for a .uk domain, rising to £24.95 per year for customers anxious to have a .com/net/org domain name. Combined with web hosting prices that start at just £39.95 a year, the package makes fido.net products some of the most competitive on the market. "It's all about making the internet accessible to everyone," says Morby. "Enthusiasts who used to run their own Bulletin Boards on fido.net are now setting up their own BBS's on the net, and our products are ideal for them, just as they are ideal for businesses who want to have their own sites but lack the technology, or even web designers who want to resell our products and services to their customers under their own banner."

It may come as a surprise to some to learn that fido.net has been offering Spam and virus-scanned email to its customers for at least the last three years. When Morby introduced it, a number of people questioned the reasoning behind it and wondered at its potential benefits. But Morby, with years of experience of mail thanks to his time with Demon Internet, knew better. And, with the high volume of Spam in circulation, he can happily claim that his customers receive virtually no Spam whatsoever in their mail boxes, and have been happily virus free since the scanning introduction, too.

It just goes to show that money and flash programming can get you so far, but without a solid background in the business, you're just another wannabe.

For more information about Jon

Artworks Enhanced

MW Software has announced that the launch of the completely new MasterWorks software (Artworks 2) will be the Wakefield Show. But even before that certain releases are being launched in the form an update to the Polygon drawing tool and the brand new SVG export module.

The modifications to the polygon tool are not extensive but welcome nonetheless. What you can have are rounded corners, on both a standard polygon and also on a stellated "polygon". The illustrations show this in action. You can alter the curvature of both the inside and outside corners of the stellated polygon and play games with the way it appears. This is the most fun of the upgrades but SVG export is much more important.

SVG is a platform-independent vector graphics format designed by the W3C (the World Wide Web Consortium). It is an official Internet standard and is based on the powerful XML standard (which we have covered in the past in Acorn User) for defining data structures for information interchange.

All other graphics file formats used on the Internet are bitmaps (GIF, JPEG and so on) but SVG is vector-based like the RISC OS Drawfile format and, of course, Artworks. This means that shapes, text and images are kept as individual, editable objects. Shapes are defined using mathematical descriptions (lines and curves), so can be rendered at any resolution.

There is a free SVGViewer plug-in for MS Internet Explorer (for Windows and Mac) and Netscape (for Windows, Mac and Linux) produced by Adobe, one of the members of the SVG design consortium. It can be downloaded from www.adobe.com This viewer is the most comprehensive known implementation of the SVG format.

Various Windows and Mac applications are able to import SVG files, including CorelDraw (10 and above) and Adobe Illustrator. To give you an idea of the file format we created a simple Artworks file with a sinfle black square and exported this as an SVG file, you can see the results in the picture.

After installing this module usually using the installer that Martin provides with his upgrades, you will find an SVG... entry in the File = > Export menu. This opens the SVG export dialogue box, or you can use Control + Shift + S.

The dialogue box offer various options: This SVGExport module only uses features that are present in the SVG 1.0 specification, the 1.1 version is not yet finalised. However some applications may claim to want 1.1 so you can set that if you want to.

The area option allows you to decide whether you are defining the whole Artworks page or just the drawing, or selection if limited to selected objects.

You can control which layers are used in the export, normally it would just be the visible layers but you can change it to include background and/or invisible layers.

SVG is primarily intended as Web format, for this reason special consideration is given to any embedded bitmap images. If you have "Export bitmaps" switched on these are saved in the same directory as the SVG file and the file contains HTML references to the bitmap name and location. All sprites are converted to PNG files and JPEGs are saved as is, the naming conventions are simply spr000/png and jpg000/jpg, and so on. You can force sprite names to be used for the PNGs if you wish.

As SVG is a textual format you could go through it afterwards and alter the graphic references to go to another directory. In fact allowing this as a feature would be useful.

Artworks allows shapes to be filled with patterns, SVG also allows this so this can be done as a proper conversion. However you may want to force the pattern fills to be saved as actual shapes, and you can. It does help to guarantee that the final image is identical to the original.

SVG also has object replication, but once again you can force replicated objects to be duplicated as individual objects. Just as you can save text as outlines when exporting to Draw, with SVGExport text can be saved as shapes.

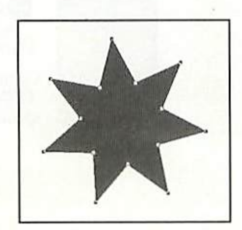
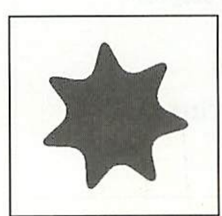
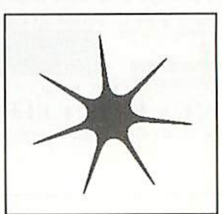
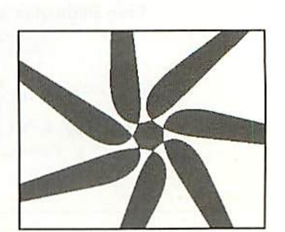
For text saving there has to be a process of font mapping which is handled by the SVGExport module. Getting the right font is a truly difficult procedure when going from application to application, even more so when going from operating system to operating system.

As Martin puts it "there is only one way to make absolutely sure that the text will look the same way as it did in your original ArtWorks file: Using the 'Export text as shapes' option. This will cause each character to be represented by a path (defined using lines and curves), so this will render correctly on all platforms, without the need for the font used to create the text."

In order to export text absolutely correctly, the exporter would have to know the exact characteristics of both the RISC OS fonts used and of the fonts on the target platform. Unfortunately, not even the necessary information about the RISC OS fonts used can be obtained, let alone those for the target platform.

However a good job is done on this and as long as you are aware of the limitations you can get a good result. SVG does have its own limitations, like the inability to operate in CMYK and HSV colour spaces, though this is entirely understandable when you remember that this intended to be a purely Web format. Other limitations include limited transparency support and no font aspect ratio except 100%.

However, all in all, this is an excellent format.



CASTLE

NEWS REPORT

Now you won't be falling over RISC OS product in the US but the Apple Mac and PC are still vying for predominance. There has been a dearth of good product following the swallowing of the smaller and more innovative software houses a few years ago and the market has suffered. Films and TV spin offs are very much in evidence, but are there ideas and lessons for UK houses?

Young adventurers

Both these products are aimed at 4 to 6-year olds. First is Dora the Explorer - Lost City Adventure (Hasbro) with appealing and simple graphics the focus is on teaching numbers while Dora searches for her Teddy. An interesting point is it switches between English and Spanish well. This dual language option has not been something which has been exploited in the UK.

Blue's Clues Kindergarten (Infogrammes) is one of the successful TV licences and this outing charts Periwinkle's nervousness about going to school and Blue's attempts to help. The activities are strong but this is for young children so the long loading and response times is not really acceptable.

Stimulation, creativity and simulation

I really liked The House That You Built that had a limited release over here, and Kingdoms and Castles (Make-Believer) looks good too. In essence it lets children design, print and build their own 3D castles choosing and colouring shields, knights, princesses and of course dragons. A little ponderous at times but great results. Look out for Village Life too - both of which would fit nicely with the Year 3 ICT work on simulations.

Staying with simulations take a look at Zoo Tycoon (Microsoft) and the expansion pack Marine Mania. You can add everything from squid to shark tunnels in your children's zoo and even decide to swim with dolphins. But if you're tempted by LEGO Creator's Harry Potter and the Chamber of Secrets which takes simulation one step further into spatial relations and programming, the reviews coming in from the States are not promising: a great idea but over-complicated and slow.

Taking a different tack is Hungry Red Planet (Health Media Lab) where massive food shortages are threatening an overpopulated Earth. A lucky cosmic accident makes Mars habitable and your task is to colonize, farm and transport food back to the home planet. As students play they learn about food choices, nutrition, percentages, graphics, economics and resource management. Home and school versions are available, the latter coming with lesson plans.

Fun science

Tivola are a German company which is having good reviews with their science range for Key Stage 3 aged students. Chemicus: Journey to the Other Side follows on from Physicus and Bioscopia. An adventure which asks children to apply their chemistry knowledge to solve a series of puzzles to rescue a kidnapped friend and it is definitely challenging. Luckily there's an accompanying PDF file as students tackle atomic structure, chemical bonding and the like.

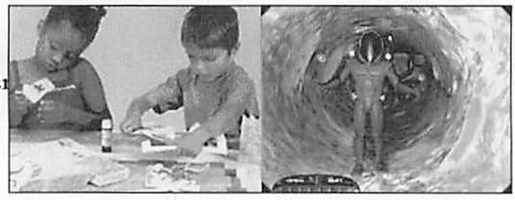
Support and education

If you have a child at home or in the classroom with asthma, diabetes or a similar chronic condition, then take a look at the Starbright Foundation (www.starbright.org) dedicated to help children combat daily medical and emotional problems. But the games are well crafted and entertaining so can be used with all children:

Quest for the Code combines excellent graphics and gameplay to help children over 7 learn how to manage asthma where Cyrus a space-age hero who recruits players to help him stop Mucus Airgon and his team of Asthma villains who try to convince children that their asthma can't be managed. As they play children find out about asthma, its triggers, medication and treatment as they collect pieces of code.

Moving on, the Life Adventure Series: Diabetes is aimed at 5 to 13-year olds centered on Xylo and takes children through the day in the life of a child with diabetes showing how blood sugar levels are checked as players navigate and take part in games and quizzes.

Or how about Explorer Series: Living with Kidney Disease for 10 to 15-year olds. Children can see and hear about other kids dealing with the disease as well as take part in a multiple choice game show. Used a lot in hospitals and dialysis centres.





Testing times for Year 6

Pam Turnbull looks at some of the advice available online when it comes to Key Stage 2 SATs

Revise Wise

www.bbc.co.uk/schools/revisewise

The BBC provide a complete package from video, tape, booklets, TV broadcasts, CD-ROMs and online tests and activities, and not just for GCSE but SATs too for Key Stage 2 and 3.

ReviseWise aims to support children as they prepare for their Key Stage 2 National Curriculum Tests in English, Maths and Science. In addition to the website there are a range of activity books available; some of which are specifically for home use, some for school. All other resources are suitable for both home and school use. All structured in a way that children will recognise from classroom lessons, so material covered at school can be revisited easily at home.

ReviseWise helps children to make the most of what they know. It summarises key information and gives examples, then offers practice questions, drawing on what children have learned at school. ReviseWise uses a clear, structured approach and shows children what actually happens on test days.

Best used as part of a planned period of preparing children for the tests both at school and at home. TV programmes and audio tapes can be used with whole classes or with smaller, targeted groups, to revisit aspects of the curriculum and to learn about test procedures and requirements. Activity books provide individual practice and reinforcement, while the website offers individuals and smaller groups the chance to focus very precisely on selected subject areas which can be revisited over and over again.

For SATs subjects covered at English, Maths and Science. Each of these subjects is split again. For instance, Science is divided into: Living Things, Materials, and Physical Processes. Within each of these you find a number of key topics divided up, mostly, to cover the content of the TV programmes but for each you'll find an activity, a factsheet and a test.

While the activity introduces each topic with an animation and asks some questions to see how much has been remembered, the Factsheet explains each topic in more detail. If you computer is unable to play the Activity (it requires Flash) then look at the Factsheet page instead which contains the same facts but in a different format. Finally, the Test page asks questions which are similar to the ones that will get asked in the National Tests and can be marked at the end by pressing the Test Me button. Best of all the web and TV programmes are free to all of us with a TV and computer!

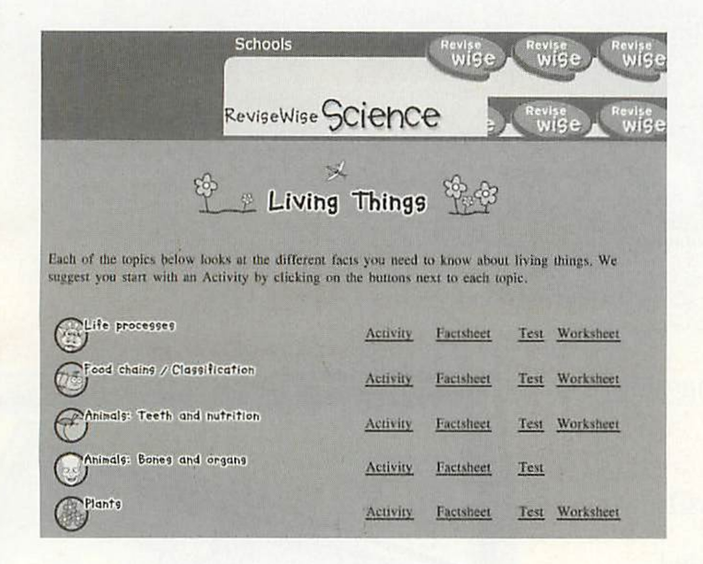
ExamOnline

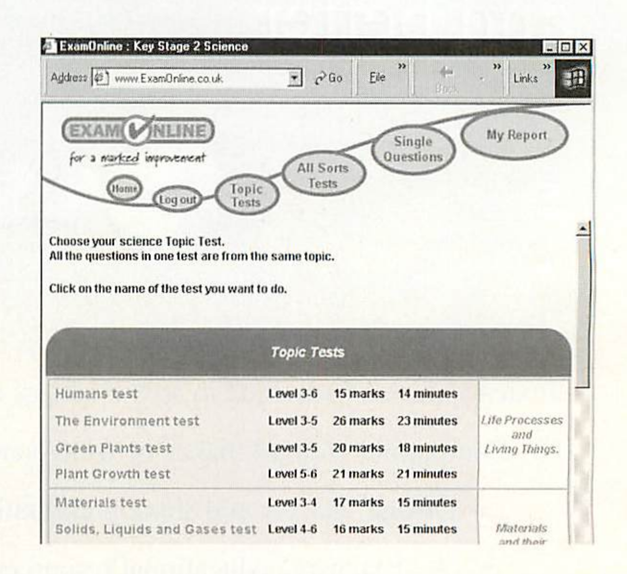
www.examonline.co.uk

An online assessment package designed to support teachers teaching the Key Stage 2 National Curriculum in Science. Assessments are organised by level and topic, but beware of the changes introduced into the 2003 tests where there is much greater attention being played to AT1 and the paper will expect longer written answers as well as including Level 5 and Level 5* questions now the Level 6 paper has been dispensed with.

This is not free but you do have the option of a free classroom trial. But what can you expect? To access the system you log in as a student or teacher. After registering your class you can see a pupil's report at any time as well as a summary of the class's results with details of the question and the pupils' marks for each one as well as an overall percentage mark for each student and a National Curriculum level indicator.

By clicking on a student you can see the student's Report Card (also accessible by the student), a nice touch is that teachers can see the actual





SATs at Key Stage 2

www.qca.org.uk/ca/tests/ks2/

If you need to find information about the changes in the Key Stage 2 tests then access the QCA Web site or ring the Helpline 020 7509 5532. Schools will have received booklets on the changes which cover the fact that extension tests have been discontinued. Instead QCA will be producing tasks for those working above or below the level. These teacher assessed tasks will be web-based, and will be available on the QCA Web site.

answers given by the student at their first and most recent attempt and if you need to you can moderate the computerised marking either up or down. You can also opt to view results by area of science: Life Processes and Living Things, Materials and their Properties, or Physical Processes.

ExamOnline has questions at all level for all abilities which makes the setting of differentiated work straight-forward and as all tests are marked automatically it saves teacher's time too.

From a student's perspective they log on and are offered short tests consisting three or four National Test questions all related to the same topic. Alternatively children can choose one of the All Sorts tests which have questions from different topics taken from the same exam paper. The NC Level and the approximate length of each test is shown. Pupils can also do One Question at a Time where the question are arranged by NC Level.

Questions look the same in ExamOnline as on an actual National Test paper. Pupils type in their answers, draws on a diagram as required and then click the Mark button and their responses are instantly marked. Answers are not penalised for minor spelling mistakes, poor grammar or punctuation and pupils are encouraged to compare their results with the correct answers.

For £9.99 children can use ExamOnline at home or school. Meanwhile a school licence £100 for 100 students and 12 teachers for access between 7am and 5pm from September 1 2002 to August 31st 2003 but if your school is smaller ring 01360 550152 to discuss requirements.

Revision Zone

www.woodlands-junior.kent.sch.uk/revision/index.html

Advice from the horse's mouth, thanks to the Revision Zone at Woodlands Junior School in Kent. As well as sample questions taken from past KS2 SATs papers there are quizzes too. For instance, access their English Revision page and you'll find advice on writing in detail with access to some great Discover Writing ideas from Barry Lane, a spelling test and tips, while clicking on the Parts of a Sentence is a good revision exercise while you make mad sentences.

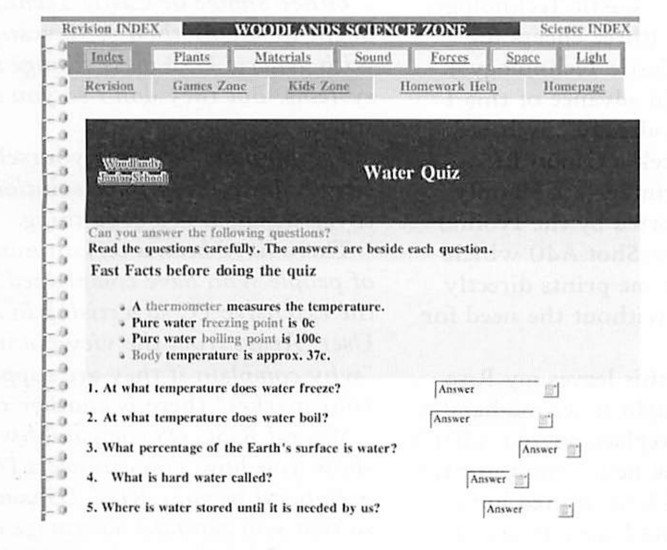
When it comes to maths there are interactive flash cards to help polish those addition and subtraction skills, activities to help with times tables, word and number problems to do in your head as well as the ability to make your own worksheets. These are not just for Year 6 but all of Key Stage 2. But just for Year 6 there are old questions, mental maths practice and online tests to see just how good you are. There is a good range of maths activities and these are useful for children who are struggling other revision tools.

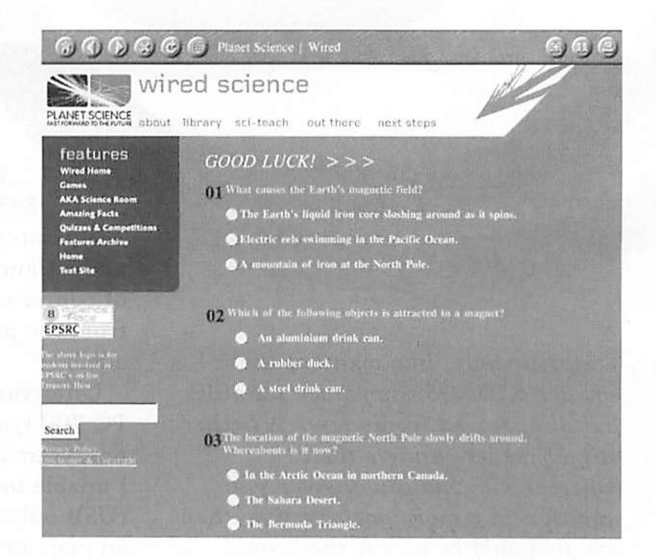
The science index looks different with sample questions and questions sorted by subject for instance, forces and sound. Access these to see key facts and a short quiz. Useful as an assessment tool but also for supporting children not attaining Level 4. Not the prettiest site in the world but full of short, really useful online tools and activities.

Planet Science

www.scienceyear.com/wired/index.html?page=/wired/games/index.html

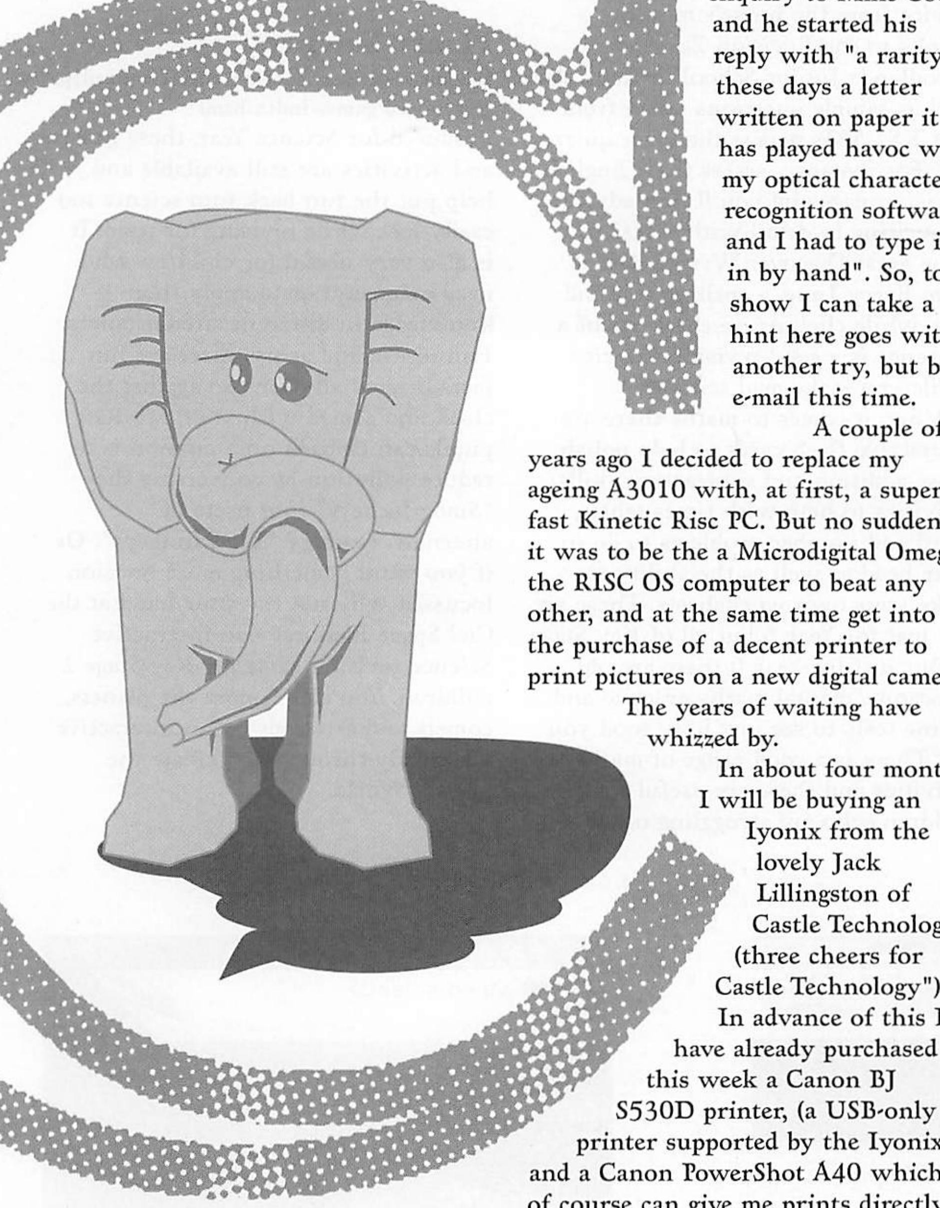
Produced for Science Year, these games and activities are still available and help put the fun back into science too easily lost while revising for tests. It is also very useful for children who need extension or to apply their knowledge in different circumstances. Fun to use and access there are fun facts littered all over. So against the clock and armed with your Eco-Raft pupils can embark on a mission is to reduce pollution by converting the "Smog Jockeys" into users of alternative energy "Eco-Monkeys". Or if you want something more revision focussed why not try your hand at the Ciel Space Explorer - an interactive Science revision game for Key Stage 2 children. You can explore the planets, comets and asteroids on an interactive virtual fly-through and create the perfect World.





Could you tell me if Datafile, a company that produced Fonts and Celtic art for the Acorn machines is still around. They were from Weston-super-Mare, "were" being the operative word.

Geoff Holroyd-Doveton
by e-mail



Unfortunately, like many of the smaller RISC OS companies Datafile has disappeared from view. Whether any of readers knows their whereabouts and can answer your question in a more positive way than me, it would be nice if they could.

You haven't mentioned exactly what it was you are after. If it is fonts then there are plenty of sites on the Web for fonts and, of course, the Electronic Font Foundry who are still around.

If it is particularly Celtic art then that is another issue completely. Does any reader know of a source for Celtic art specifically for RISC OS? There are plenty of general Celtic resources available, just type "celtic knotwork" into any search engine.

My future with RISC OS

Some time ago (in November 2001, appearing in Acorn User issue 243, Feb 2002) I made enquiry to Mike Cook and he started his reply with "a rarity these days a letter written on paper it's has played havoc with my optical character recognition software and I had to type it in by hand". So, to show I can take a hint here goes with another try, but by e-mail this time.

A couple of years ago I decided to replace my ageing A3010 with, at first, a super-fast Kinetic Risc PC. But no suddenly it was to be the a Microdigital Omega, the RISC OS computer to beat any other, and at the same time get into the purchase of a decent printer to print pictures on a new digital camera.

The years of waiting have whizzed by.

In about four months I will be buying an Iyonix from the lovely Jack Lillingston of Castle Technology, (three cheers for Castle Technology").

In advance of this I have already purchased this week a Canon BJ S530D printer, (a USB-only printer supported by the Iyonix) and a Canon PowerShot A40 which of course can give me prints directly from the printer without the need for a PC.

Unfortunately this leaves my Risc PC 700 (yes I bought it second-hand a few years ago to replace my old A3010) unable to use the new Canon printer (USB only), but I have waited long enough already and I have twoother older printers already.

This leaves me with my questions:

How will I be able to read, manipulate, print my photographs from my CompactFlash Cards via my yet-to-be purchased new Iyonix? Will I need to buy a 'yet to be' marketed CompactFlash data card reader for RISC OS to be able to input, read, manipulate and then print my photographs andI assume this will also need the purchase of some sort of software like "Win95FS" to allow manipulation and so on?

Or do I buy a PC and use the free software given me by Canon, I really want to buy an Iyonix?

I will be buying an Iyonix.

Ian Chasmer
by e-mail

You have highlighted, directly and indirectly, the main difficulties we are currently facing in the RISC OS market. First and foremost is the provision of USB support.

We are only a small market and it takes time for enthusiasts (professional or amateur) to bring product to market. This month Stuart Tyrrell has brought an MP3 player to RISC OS, the software for this is essentially just a mass storage driver for USB storage devices on RISC OS.

But, as predicted in Acorn User, it will (naturally) be tied directly to the product it is being sold for. Hence it will not work with other mass storage devices. Why do I mention it? Because CompactFlash and SmartMedia are mass storage devices.

Either Simtec or Castle Technology ought to supply their USB systems with generic USB mass storage filing systems. But they don't so you are stuck.

As you have indicated yourself you already have the printer solution covered which is a good thing.

There have been a certain number of people who have complained about the extensive PC advertising in Acorn User. Apart from the viewpoint of "why complain if they are supporting your market" there is another reason.

Several RISC OS companies will show you how you can use a PC as a peripheral to your RISC OS computer so that you can take advantage of the extensive peripherals available but still work using your favourite user interface.

Good luck with your purchases.

Not forgotten



engineered from the inside out



£1399 inc vat

delivery £20

Get your hands on the IYONIX pc MAX, one of the superb new range of RISC OS computers from Castle. It is packed with a huge 100GB hard drive, a massive 512MB of DDR RAM a super-fast CD burner, and bags of great software.

The new IYONIX pc features an XScale processor using the ARM instruction set. It runs at a breath-taking 600MHz - more than 250% faster than the current StrongARM processors. Plus it has accelerated high resolution graphics of up to 2048 x 1536 pixels in 16 million colours, a UDMA100 hard drive and 200MHz DDR memory.

So spring into action now – this special offer ends on 30th April 2003!

Tel: 01728 723200

www.iyonix.com









There is also a wide range of monitors, printers, scanners and other peripherals. Call now for details!



Castle Technology Ltd
Ore Trading Estate
Woodbridge Road
Framlingham
Suffolk IP13 9LL

Tel: 01728 723200
Fax: 0800 783 9638
E-mail: sales@iyonix.com
Internet: www.iyonix.com

IYONIX PC MAX SPECIAL OFFER SPECIFICATION

MEMORY/HD/CDRW SPECIFICATIONS

Hard drive	100GB
CDRW	48-speed write, 24-speed re-write, 48-speed read
Floppy drive	Standard 3.5" supporting ADFS, DOS and Atari from 360K to 1.6MB
Memory	512MB 64-bit 200MHz DDR RAM

CASE – MicroATX midi tower
2 x 5.25" bays
3 x 3.5" bays (1 hidden)
4 x PCI slots
'Soft On' switch on front
'Reset' recessed on front
Dimensions(mm) 360H x 185W x 402D (must stand min 65mm from wall)

PSU
Input 115-230 volts 50-60Hz
250Watt PSU with silent mode
On/off switch

MOTHERBOARD FEATURES

Size	MicroATX
Processor	600MHz XScale 80321
Sound	CD quality AC97, 16bit soundblaster compatible
Unique ID	MAC address
PCI signalling	3.3v
Video	Resolutions of up to 2048 x 1536 pixels in 16 million colours

EXTERNAL PORTS
2 x RS232 Serial ports
10/100/1000 base twisted pair networking port
Audio in socket
Microphone socket
Audio out/Headphone socket
Video
4 x USB (2 front, 2 rear) – USB-to-parallel cable also available

INTERNAL CONNECTORS
2 x IDE connectors UDMA100 supporting 2 drives per connector (1 occupied)
32-bit EASI podule expansion socket (2 slot backplane required)
FDD connector (occupied)
DDR RAM socket (occupied)

PCI EXPANSION
2 x 64-bit; 2 x 32-bit
(1 – nVidia Geforce 2 MX400 graphics card,
1 – USB 1.1 expansion card USB,
2 – unoccupied for customer use)

OPERATING SYSTEM
RISC OS 5 held in 4MB FLASHROM
(field upgradeable)

KEYBOARD
UK 105 key, soft-touch, membrane USB keyboard

MOUSE
3 button USB mouse

SOFTWARE

Writer +	Fireworkz	Oregano 2
MessengerLITE	Dialer	CDBurn Lite

\+ many other applications and demo software

Other specifications available: call 01728 723200 or visit www.iyonix.com